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THE DIETITIAN AND HER PROFESSION[1]

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TWENTY-ONE years ago a child was born in the family of the associations allied to the medical profession. This child was christened The American Dietetic Association, affectionately known to her admiring friends as "Ada". To those of us who recall with fond recollections the meeting at which this organization was formed, the intervening years seem a long time, but twenty-one years in the life of a profession is a short period, indeed.

The medical profession is proud to trace its ancestry back to the time of Hippocrates, approximately 2400 years ago.

It is true that so-called medical practice is known to have existed since the beginning of civilization, but not until the practitioners possessed sufficient information and technical skill to be called "learned", could the practice of medicine be said to be a profession. The nursing profession traces its ancestry to the time of Florence Nightingale, or to about 1860—a period of 80 years. Nursing, too, has existed from time immemorial but not until it acquired a scientific background could it be called a profession. Shortly after Florence Nightingale founded a training school for nurses at St. Thomas' Hospital in London, hospitals in this country began to establish schools of nursing incorporating the Nightingale system with regular classwork and definite ideals of practice and ethics.

Man has always of necessity been interested in food, and even primitive medical practitioners advocated the eating, or the restriction, of certain foods in the treatment of disease, as indicated by some of the oldest writings of mankind. One old Babylonian tablet (1) states that "if a man has a pain inside, food and drink coming back to his mouth. . .let him refrain from eating onions three days". It further advocates for this condition the eating of honey, lamb fat and butter, thus constituting one of the earliest dietary prescriptions on record. Nursing has always been concerned with the feeding of the sick. Florence Nightingale and her staff of workers were interested fully as much in the feeding of the sick and wounded at Scutari as in other phases of nursing care. But interest in *scientific* food preparation began in

[1]The President's Address, read before the Opening Session, American Dietetic Association, Milwaukee, October 10, 1938.

the late 1870's with the opening of the Boston Cooking School which graduated its first student, Maria Parloa, in 1877. Other cooking schools were started and shortly thereafter their graduates began filling positions as instructors in foods and cookery in nurses' training schools. The first of which we have information was that of Johns Hopkins Hospital which employed Mary Boland at the munificent salary of $30. per month to teach nurses how to prepare foods for the sick. Thus began the work of the first resident teacher in foods and cookery. During the early 1890's other schools employed instructors in foods and cookery. Our own Emma Smedley joined the Johns Hopkins staff in 1891. Other training schools, however, sent their students to cooking schools for instruction in foods and cookery. Mt. Sinai, New York City, had graduated 126 students in this subject by 1891.

A small group of women interested in hospital dietetics associated themselves during the early part of the present century with the Lake Placid Conference, the forerunner of the American Home Economics Association. Soon after the founding of this association in 1908, the same group, together with women in school lunchrooms, college dormitories, and other phases of institution work, formed what was known as the Institution Administration Section of the American Home Economics Association.

In 1917, our country was stirred to its depths by war activities, and home economics teachers throughout the country were busily engaged in teaching the public how to conserve food in order to have sufficient supplies for overseas. The American Home Economics Association decided, therefore, not to hold an annual meeting that year. Since it did seem advisable, however, for those engaged in hospitals to participate in this food conservation work, and in order to secure the cooperation of the group, a special meeting was called in Cleveland, October 18–20. After two days of continuous meetings devoted entirely to the problems of the dietitian, during which great enthusiasm was shown, discussions began to center on the forming of an organization which would specifically concern the interests of dietitians. Accordingly, on October 20, 1917, a motion was made by one of our good Canadian friends[2] that a national association, to be known as the American Dietetic Association, be formed. This motion was seconded and carried, and our professional association thus came into existence.

Hospital contingents were being sent overseas and requests were coming in for dietitians, even though many of the commanding officers had no conception of their work and knew not what duties to assign them. The word "dietitian" did not appear in any of the army regulations. It was not until the fall of 1918, when a dietitian[3] was appointed to the staff in the Office of the Surgeon General, that their functions were defined. Three hundred and fifty-six dietitians were recruited for army service through the efforts of the American Red Cross. Because of the newness of our national organization and because our number

[2] *Editor's Note.* This motion was made by Annie Laird, now Honorary President of the Canadian Dietetic Association, with Lenna F. Cooper in the chair.

[3] *Editor's Note.* Lenna F. Cooper received this appointment in November, 1918.

was small, it is not surprising that we were almost an unknown quantity during the World War, but the demand for dietitians and the experience of those who did serve at home and abroad stimulated the new organization and made for unity of purpose. It is gratifying, therefore, to know that our numbers have grown from a charter membership of 58 to almost 3800 in 1938.

Many things have transpired within the twenty-one brief years of our association's existence to affect materially the work of our profession and to make it one of the most interesting and stimulating to women. A brief review of the developments in nutrition research as it relates to medicine will bring to mind some of the advances in the scientific aspects of our work.

In 1917 there was warfare not only in Europe, but also among our scientific organizations where the adherents of the low protein ration for the normal standard were in opposition to those who believed in the high protein standard. Calories were becoming popular and dietitians were working day and night calculating them. Much importance was attached to the acid-base balance. Fletcherism was just beginning to wane. Comparatively little was known of "vitamines", then referred to as "accessory substances". Fitch (2) in 1918 said: "Just what these substances are. . .is at present the subject of research and investigation. This much is known: they possess curative properties, they are not protein, carbohydrate, fat or inorganic salt". He further said: "it seems probable that they . . .are of such importance that their absence produces certain diseases aptly called deficiency diseases" and mentions beriberi, pellagra and scurvy as such. Compare this with the large number of chemically identified vitamin factors now known to exist.

The treatment of typhoid and tuberculosis has been greatly changed due to the advance in medical science. Pity the poor tubercular patient who had to consume one to two dozen eggs per day! Simple goiter has almost disappeared due to the introduction of iodized salt in goitrous regions. In epilepsy the diet has proved to be an important factor. Urinary lithiasis, pyelitis and cystitis are now treated through dietary prescriptions. Rickets, pellagra and other deficiency diseases are almost miraculously cured by the use of high vitamin diets and vitamin concentrates. We do not distress our patients with liver concoctions now that liver extract is available. Insulin has not only added years to the life of our diabetic patients but made life more tolerable since they no longer have their starvation days, and are no longer fed on thrice-cooked vegetables. Who would have dared a few years ago to have given a high protein diet to a case of nephrosis, or even a so-called adequate protein ration to a patient with nephritis? Allergy is now one of the newest cross-word puzzles for the physician and the dietitian.

Life expectancy has increased remarkably in the last twenty-five years. In 1911-12 (3) it averaged (for male and female) 47 years; in 1936 it reached a total of 61 years, an increase of 14 years. According to the current edition of the League of Nations statistical year book, the male infant now has a life expectancy of 60.7 years, while the female has a life expectancy of 64.7 years, closely approximating the Biblical

"three score years and ten". This advantage of the female over the male has been explained by Dublin (4): "Either they lead more protected lives or utilize to a greater degree than men the knowledge that *modern science* has made available". There is no doubt but that these results are largely due to the education of the public in preventive measures, including nutrition and food selection. As a result of the increase in average length of life, we are now confronted with more of the chronic diseases than formerly. Since many of these cases go to clinics rather than to hospitals, there is every reason to believe that our food clinics will increase.

Not only has science in medicine made many changes which have affected our profession, but industry also has made distinct contributions through improved production, transportation, storage and distribution of foodstuffs. Due to better transportation, it is now possible to have fresh fruits and vegetables all year round. The method of quick freezing for fruits, vegetables and meats has added greatly to their quality and the variety of our winter menus. Canned goods have also improved in quality.

There is romance, indeed, in the factory which cooks our breakfast cereals and distributes them in tasty tidbits, securely sealed in waxed containers, dry and crisp for our morning meal. In the early part of the century, Dr. Wiley waged his war against food adulteration and in 1906 was successful in securing the passage of a pure food law which stood practically unchanged until this present year when cosmetics were added to our food and drug bill. This is probably because of their vitamin content! As a result of these food laws, we now have grading and inspection of meats, vegetables, fruits and dairy products.

A visit to our kitchens and serving rooms again reminds us of what science and industry have contributed to our workshops. Our tables, cabinets and most of our cooking equipment are now made of stainless steel—a joy to the eye compared to the sheet iron and the tin lined copper equipment of a few years ago. Many labor-saving devices have come to our aid, such as the mechanical dishwasher which, by the way, was invented by a woman, Mrs. Garris-Cochran, about 1890, and was just making its debut into the hospital field during the early part of this century. Needless to say, the dishwasher has undergone many changes which now make it one of our most essential pieces of equipment. In looking through an old hospital magazine of the vintage of 1910, just two advertisements for kitchen equipment appeared—a dishwasher of the basket type and a range. I cannot refrain from saying that I also found an announcement of the fifth edition of *Practical Dietetics* by our good friend, Alida Frances Pattee. In 1913, *Modern Hospital*, in its first volume, carried advertisements for a compartment steamer, a jacketed kettle and a food chopper, the latter described as "a new and superior mincing machine for hospitals". In 1914 there appeared an announcement of a warmer (5) with a white enamel top and heavy tin telescope cover, equipped with four stone jars and heated by steam or gas.

Potato peelers, slicers and mixers are inventions of this century; likewise, mechanical refrigeration. Thermostatic controls for ovens, fryers, urns, and

steamers are also new. The insulated food truck was invented during the World War at one of our southern army hospitals. Needless to say, it, too, has undergone many improvements, including electrification, all of which now makes it a serving table as well as a food carrier.

It is interesting to note that it is now possible, with our modern equipment, to serve a meal in an average-size hospital with an expenditure of labor equivalent to 10 minutes per meal, per capita, and a labor cost of approximately 7 cents per meal, per capita.

Changes in the social and economic worlds have also affected our profession. Commerce and modern industry have called literally thousands of men to the cities, thereby increasing large group living. As a result multiple family dwellings and institutions including hotels, restaurants, college dormitories and hospitals have increased at a rapid rate. That colleges and universities have increased in size and number has been shown by Lindsay and Holland (6) who state that in 1930 there were "over fourteen times as many college students in this country as there were sixty years ago", and that the "college and university population has grown more than four times as rapidly as has the general population". The feeding of this vast crowd of college folks is, therefore, an excellent field for the trained food manager.

The hotel business is one of the great industries of our country, said to be the ninth largest industry in the United States. Some of our better hotels are now employing dietitians. The restaurant business also has grown tremendously. There are now over 150,000 restaurants in the country, and it has been estimated (7) that approximately 17 per cent of all meals served are outside the home. Within a period of approximately thirty years the whole school lunchroom system has developed from a small emergency and supplementary feeding service to a position of wide usefulness in the social and physical development of all students. This field of activity will, we believe, be of continuing interest to the college trained woman.

The growth of hospitals is shown by the fact that in 1873 there were 149 in the United States and these served chiefly charity and mental cases. In 1911 there were 2500; today there are 6160 registered hospitals (8) with a bed capacity of 1,024,000 beds. Yet we are told by the National Health Conference (9) held recently in Washington, D. C., that our facilities are inadequate and a plan has been advanced for expanding them.

That large group living is increasing and therefore creating a demand for large group feeding, is clear indeed.

It will be seen, therefore, that in the last two decades many changes have taken place which have materially affected our work and our profession.

It now seems appropriate to pause for a moment to consider the future and the possibilities of expansion for our profession. In the commercial field we have barely inserted an entering wedge as indicated by the fact that only 2 per cent of our members are in tea rooms, cafeterias and restaurants. The school and college dining halls are now managed by about 6 per cent of our members. There are, of course, trained women in this field who are not mem-

bers of our association. It does seem fitting, however, that we should stand together to hold these positions against the inroads of commercially minded people whose first concern is profit rather than the welfare of the child. The hotel field has not been more than explored by a few brave pioneers. Surely, there is room for expansion here.

Although there are a million hospital beds in the United States, there are, approximately, but 2400 qualified dietitians in the hospital service. If the minimum ratio of one dietitian to 100 patients were in force, there would be 10,000 dietitians in the hospitals of the country. But unfortunately more than 50 per cent of these beds are in mental hospitals where the need for dietitians seems not to have been realized. Another 8 per cent are in tuberculosis hospitals which are usually understaffed.

It would seem fitting that our state associations should undertake to familiarize their state and local institutions with the work of the dietitian and her accomplishments. This should not be a difficult problem, since people generally are now food conscious and even politicians should be made so. The small hospital of 75 beds or less is another field for development. Here it is often necessary to make a combination of duties, usually that of the dietary and housekeeping departments, but certainly there is still room for much greater growth. The steady growth of our association shows that we are making inroads into these seemingly barren fields.

There are probably no persons outside of our profession who are more interested in knowing what are the possibilities for development of the profession, than the college student and her home economics professor. If the student is to become a dietitian, she must elect certain majors, and some subjects not always included in those majors. If, at the end of her college course, there are no openings for her in an approved course, it is a serious matter to her. If, on the other hand, she spends an additional year in postgraduate experience and then is unable to secure a position, it is indeed a catastrophe. It seems, therefore, highly proper that we should try to evaluate this problem for her.

The past experience of our association would seem to indicate that our growth has been continuous and steady. While there is room for much greater development, in all probability it will come gradually as in the past, unless there should be rapid development in the national health program, including the building of new hospitals and the establishing of clinics.

As a professional group, we are still small. The American Home Economics Association, with a membership of 12,000, would seem to indicate that for the college graduate there are about three openings for positions under the general heading of home economics, to one in our profession. The membership of the American Medical Association comprises 110,000 doctors; in the nursing profession, there are approximately 250,000 registered nurses. The ratio of dietitians to graduate nurses in a hospital is about 1 to 35; but the ratio of dietitians to the total number of nurses, including those in private practice, is about one to one hundred. I doubt that we shall ever be able to approximate in numbers either the

teaching, the medical, or the nursing professions.

Upon those of us who are training these college graduates in the techniques of our profession, there is indeed a grave responsibility, for we must not forget that our students of today will be the dietitians of tomorrow. Upon them we place the responsibility of carrying on and of making our profession what we and they would have it be. As Hippocrates said of the medical profession, "life is short and the art [of healing] is long".

Already we have said that inherent quality of the student is of first consideration, but we must not forget that by example and instruction we are the moulders of future dietitians. I believe that our techniques are well developed but I am not so sure that we have advanced the *art* of our profession to the same extent. It is true that our students come to us with some knowledge of psychology and sociology but few of them, I fear, have developed a philosophy of life that enables them to meet with equanimity some of the trying situations which might be said to be inherent in the work. The art of getting along with people should therefore be our first objective in our teaching program. This implies a study of human relationships including the association with patients, professional associates and employees. There is no question but that personnel management today is one of the greatest problems to be met by the young dietitian. Indeed, the art of management, or the human side of our work, must not be neglected. The art of preparing and serving food tastily and attractively is always to be emphasized.

With the cooperation of our colleges in the guidance and the recommendation of outstanding students for this type of work, and with painstaking effort on the part of those directing our approved courses, I am confident that we shall continue to build as we have in the past—steadily and securely. With the momentum of our present rate of growth, I hope that we may, in the not too distant future, realize our goal of 10,000 members. "A dietitian in every hospital" might be a desirable slogan for the coming years.

I am confident that with the growth of our state and local associations, our national association is building more firmly each day. Our affiliated organizations are like the roots of a tree which support and strengthen the whole. The House of Delegates constitutes the intertwining limbs which it is hoped will soon blossom with added responsibilities and accomplishments. Through this representative group, the members of which it is hoped will soon be chosen for a longer period of time than at present, I believe that we shall acquire more stability of government than is possible with an ever-changing administration. Now that we have "come of age", in celebrating our twenty-first birthday it is appropriate that we should take a long look ahead, define our aims and our philosophy, and thus secure to our profession and to our successors the benefits and good-will due to a continuing policy, conservative yet progressive.

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A DIET RESTRICTED IN POTASSIUM[1]

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CLINICAL investigations made by members of the staff of The Mayo Clinic and of The Mayo Foundation (1) indicate that optimal therapeutic results in the treatment of Addison's disease demand not only the administration of active extracts of suprarenal cortex, together with sodium chloride and sodium citrate or bicarbonate, but also restriction of the intake of potassium. The demand for a palatable diet low in potassium resulting from these studies was met as follows:

The content of potassium in an average normal diet is between 4 and 5 gm. each day. However, if there is a liberal use of foods and food accessories rich in potassium such as soup, broths and gravies containing meat stock or meat extract, catsup, mustard and other seasonings, dried legumes, nuts, tea, coffee, chocolate, Postum, bran, dried fruits, like dates and figs, and whole grain cereals, this amount may be more than doubled.

In view of the fact that a daily intake of 4 gm. of potassium has been found to affect unfavorably the course of Addison's disease, a diet containing half this quantity of potassium has been planned.

To construct a diet restricted in potassium, it was found necessary (a) to limit the selection of bread, cereals, and sugars to the highly refined products; (b) to use moderately, milk, meat, fruits, vegetables and condiments, and (c) to include vegetables and meats prepared according to a special method (2) whereby their content of potassium is reduced to such an extent that they may be used with safety.

The special method of preparing vegetables and meats consists essentially in cutting the vegetables into small pieces and cooking them in six to eight times as much water as is ordinarily employed for vegetables. Vegetables which are prepared thus contain from 60 to 70 per cent less potassium than vegetables prepared by ordinary methods without a concurrent diminution of palatability. Meat also is cut into small portions and cooked in a so-called parchment paper bag, in a ratio of 1 part meat to 6 or 8 parts water. The original potassium of the meat is reduced by these means to a fourth of the previous concentration while other nutrients and extractives which give flavor to the meat are retained.

That the diet as finally designed is fully adequate with respect to calories, protein and minerals, can be seen from table 1. The caloric yield of 2802 is in excess of the amount (35 calories per kilogram of body weight) suggested as a standard for an average-sized man doing moderately heavy work. To maintain or produce normal body weight the calories may be increased or decreased by the addition or subtraction of such foods as butter, mayonnaise, and refined sugar, which have a negligible content of potassium. By substituting

[1] Abridgment of thesis submitted to the faculty of the Graduate School of the University of Minnesota in partial fulfillment of the requirements for the degree of Master of Science in Home Economics. Received for publication, August 8, 1938.

whipping cream, containing 40 per cent butter fat, for coffee cream, containing 20 per cent butter fat, a further increase in the caloric value of the diet may be effected if necessary.

addition will raise the content of potassium by 0.070 gm.

The total inorganic constituents in the diet compare favorably with Sherman's standards (3) of 0.68 gm. of calcium,

TABLE 1

Chemical composition of a diet restricted in potassium

FOOD	TOTAL	CARBOHYDRATE*	PROTEIN*	FAT*	POTASSIUM†	CALCIUM‡	PHOSPHORUS‡	IRON‡
	grams	*grams*	*grams*	*grams*	*grams*	*grams*	*grams*	*grams*
Bacon	10	0	3	5	.016		.011	.00015
Milk	300	15	9	12	.450	.354	.279	.00060
Cream, 20 per cent butter fat	150	8	5	30	.189	.135	.120	.00030
Eggs	100	0	12	12	.141	.063	.224	.00313
Bread, white	90	48	8	2	.096	.028	.087	.00070
Rice, polished, weighed dry	25	20	2	0	.017	.003	.025	.00020
Cereal (Farina), weighed dry	15	12	1	0	.018	.003	.019	.00012
Cheese	20	0	6	6	.037	.186	.140	.00026
Meat, specially cooked	75	0	19	11	.070	.011	.205	.00285
Sugar, white	150	150	0	0	.004			
Butter	50	0	0	43	.005	.008	.008	.00010
Mayonnaise	15	0	0	13	.001			
Fruit from group III§:								
Orange juice	100	10	1	0	.200	.024	.018	.00040
Fruit from group II§:								
Raw pears	100	15	1	0	.125	.015	.018	.00032
Raw strawberries	100	10	1	0	.125	.034	.028	.00068
Potato, specially cooked	100	20	2	0	.125	.008‖	.029‖	.00051‖
Vegetable from group I§								
Peas, specially cooked	100	15	2	0	.075	.015‖	.070‖	.00104‖
Vegetable from group IV§:								
Head lettuce	100	3	1	0	.300	.017	.040	.00050
Total calories, 2802		326	73	134	1.994	.904	1.321	.0119

* From Wilder, R. M.: A Primer for Diabetic Patients. Ed. 6, Philadelphia: W. B. Saunders, 1937.

† From table 4, page 763.

‡ From Sherman, H. C.: Chemistry of Food and Nutrition. Ed. 5, New York: The Macmillan Company, 1937.

§ *See* tables 2 and 3, pages 761 and 762 for grouping of fruits and vegetables.

‖ The values for calcium, phosphorus and iron for the specially cooked potatoes and peas are respectively, 35, 45 and 50 per cent lower than Sherman's values for these vegetables in the raw state.

The amount of protein (73 gm.) meets the accepted dietary standard of 0.66 to 1.5 gm. of protein per kilogram of body weight. When more protein is needed, an egg may be added; however, this

1.32 gm. of phosphorus and 0.012 gm. of iron (table 1). It should be recalled that Sherman added a 50 per cent safety factor to determined requirements. In calculating the mineral content of the diet

TABLE 2

Classification of vegetables according to potassium content, expressed in grams per 100 gm.

GROUP I RANGE, 0.05–0.10 AVERAGE, 0.075	GROUP II RANGE, 0.1–0.15 AVERAGE, 0.125	GROUP III RANGE, 0.15–0.25 AVERAGE, 0.2	GROUP IV RANGE, 0.25–0.35 AVERAGE, 0.3	GROUP V RANGE, 0.35–0.45 AVERAGE, 0.4	GROUP VI RANGE, 0.45–0.55 AVERAGE, 0.5
		Fresh*			
		Artichoke	Cabbage	Beets	Dandelion greens
		Asparagus	Cabbage, red	Brussels sprouts	Potatoes
		Corn	Carrots	Endive	Spinach
		Cucumbers	Cauliflower	Kohlrabi	
		Egg-plant	Celery	Mushrooms	
		Green peppers	Chard, Swiss	Parsnips	
		Hominy	Lettuce	Potatoes, sweet	
		Leeks	Peas		
		Onions	Pumpkin		
		Onions, spring	Romaine		
		Radish	Rutabaga		
		Squash, summer	Squash, Hubbard		
			String beans		
			Tomato		
			Turnips		
			Turnip tops		
			Water cress		
		Specially cooked†			
Asparagus	Cabbage	Beets (in parchment paper)			
Carrots	Cauliflower	Brussels sprouts			
Corn (in parchment paper)	Kohlrabi	Spinach			
Onions	Parsnips				
Pumpkin	Peas				
Rutabaga	Potatoes				
Squash, Hubbard	String beans				
Turnips	Tomatoes (in parchment paper)				
		Canned			
String beans	Peas	Asparagus			
Wax beans		Corn			
		Spinach			
		Tomatoes			

* Fresh vegetables may be consumed raw or cooked in any way desired.

† Directions for special cooking are given on page 769. Values given for specially cooked vegetables were obtained by analysis after cooking. When cooked as described in a large volume of water, the reduction of potassium averages 70 per cent in the case of carrots, kohlrabi, onions, turnips, parsnips, potatoes, rutabagas, squash, pumpkin, and spinach; 60 per cent in the case of cauliflower, cabbage, peas, asparagus, string beans, and Brussels sprouts. Corn, beets and tomatoes must be cooked in parchment paper because otherwise they would lose their color or become badly disintegrated. The reduction of potassium in these three vegetables averages 50 per cent.

described, attention was given to the fact that vegetables, when specially cooked, lose calcium, phosphorus and iron as well as potassium. McCance and co-workers (4) have shown that the loss of calcium, phosphorus and iron, in vegetables cooked in an excess of water after being peeled and cut into small pieces (about 1 to 1.5 gm. in weight) averages 35, 45, and 50 per cent respectively. The values of calcium, phosphorus and iron for potatoes and peas given in table 1 therefore are 35, 45 and 50 per cent lower than Sherman's values for these vegetables in the raw state.

Judged by the values given by Daniel and Munsell, (5) the diet as planned yields around 5500 Sherman units of vitamin A, 300 Sherman units of vitamin B_1 (B), 600 Sherman units of vitamin B_2 (G) and 150 Sherman units of vitamin C. The daily vitamin requirement of man is still unknown. Rose, (6) in the last edition of her book on nutrition, gave the following estimates: 3000 to 4000 Sherman units of vitamin A, 300 to 500 Sherman units of vitamin B_1 (B), 500 to 600 Sherman units of vitamin B_2 (G) and 50 to 60 Sherman units of vitamin C. Judged by these estimates, the diet restricted in potassium may be deficient in vitamin B_1. This is to be expected inasmuch as highly milled cereal products must be used in order to keep the content of potassium at less than 2 gm. Furthermore, the vegetables may lose more vitamin B_1 by the special cooking than they would lose by ordinary cooking. They also may lose more vitamin C and B_2. For this reason 1 mg. of thi-

TABLE 3

Classification of fruits according to potassium content, expressed in grams per 100 gm.

GROUP I RANGE, 0.05–0.1 AVERAGE, 0.075	GROUP II RANGE, 0.1–0.15 AVERAGE, 0.125	GROUP III RANGE, 0.15–0.25 AVERAGE, 0.2	GROUP IV RANGE, 0.25–0.35 AVERAGE, 0.3	GROUP V RANGE, 0.35–0.45 AVERAGE, 0.4
		Fresh*		
Blueberries	Apples	Cherries	Apricots	Avocados
Cranberries	Lemons	Blackberries	Cantaloupe	Bananas
Huckleberries	Lemon juice	Gooseberries	Currants, red	Currants, black
Pomegranates	Pears	Grapefruit	Currants, white	Limes
Watermelon	Strawberries	Grapes, black	Figs, green	Rhubarb
	Tangerines	Oranges	Loganberries	
		Orange juice	Mulberries	
		Peaches	Nectarines	
		Plums, red	Persimmons	
		Quinces	Pineapple	
		Raspberries	Plums, green gage	
		Canned		
Pears	Peaches	Apricots		
	Pineapple	Grapefruit		
	Raspberries			

* Fresh fruits may be consumed raw or cooked in any way desired.

TABLE 4

Average potassium content of foodstuffs expressed in grams per 100 gm.

FOODSTUFF	POTASSIUM CONTENT	FOODSTUFF	POTASSIUM CONTENT
Beverages:		Condiments, and so forth:	
Apple cider*	.095	Citron, preserved**	.017
Beer†	.072	Cocoanut, dried*†‖	.544
Champagne†	.114	Horse-radish*†	.445
Coca-Cola	0	Mustard*	.761
Coffee, beverage‡	.110	Olives, green¶	
Coffee, roasted bean‡	1.651	Olives, ripe‡	.003
Ginger-ale‡	0	Paprika*	2.075
Grape juice*	.106	Pepper, black*	1.140
Kaffee Hag, roasted bean‡	1.647	Vinegar, cider*	.165
Postum‡	3.238		
Red wines†	.075	Dairy products:	
Sweet wines†	.134	Cheese (all kinds)*†	.187
Malaga†	.165	Cream*†	.126
Sherry†	.186	Eggs*†‡‖	.141
Bordeaux†	.083	Yolk*	.114
Tea, beverage‡	.030	White*	.155
Tea, dried leaves†‡	1.689	Ice cream, commercial‡	.169
White wines†	.056	Milk, butter*	.151
		Milk, whole†	.150
Bread and cereal products:			
Bread, white*	.108	Fats:	
Bread, whole wheat*	.208	Bacon fat‡	0
Bread, rye*	.151	Butter*§	.009
Corn Flakes‡	.132	Margarine†	.048
Corn-meal, dry*	.213	Mayonnaise§	.007
Cream of Wheat, dry‡	.106	Pork fat‖	.175
Farina, dry*	.120		
Flour, white*	.115	Meats and fish:	
Grape Nuts‡	.342	Anchovy†	.152
Macaroni, dry*	.130	Bacon, raw*†	.160
Oatmeal, dry*†‡	.339	Beef, corned‖	.117
Puffed wheat‡	.117	Caviar†	.422
Rice, polished, dry*†‡	.068	Clams, round*	.131
Rice, brown, dry†	.561	Clams, soft, long*	.212
Tapioca, dry‡	.039	Cod, dried and salted‖	.031
Wheat bran*	1.217	Crab, canned‡‖	.260
		Fish, raw (all kinds)†‡‖	.323
Concentrated sweets:		Lobster, canned‖	.258
Candy, sugar§	.004	Meat extracts†	4.160
Corn syrup, white (Karo)	0	Meat, raw (all kinds)†‡‖	.372
Honey*	.386	Oysters, large, raw*†‡‖	.145
Jelly made with fruit juice*‡	.126	Oysters, small, raw‡	.047
Maple syrup*	.208	Salmon, canned‖	.320
Molasses*	1.349	Sardines, canned in oil‖	.433
Sugar, white§	.004	Shrimp, canned‡	.122
Sugar, brown†	.265		

TABLE 4—*Concluded*

FOODSTUFF	POTASSIUM CONTENT	FOODSTUFF	POTASSIUM CONTENT
Miscellaneous:		Vegetables and fruits*†‡‖:	
Agar‡	.127	Vegetables in group I	.075
Baking powders, tartrate	9–12	Vegetables in group II	.125
Baking powders, phosphate	0	Vegetables in group III	.200
Cocoa†	.940	Vegetables in group IV	.300
Cream of tartar	20.720	Vegetables in group V	.400
Gelatin‡	0	Vegetables in group VI	.500
Yeast, brewers', dried‡	2.055	Fruits in group I	.075
		Fruits in group II	.125
Nuts (all kinds)*†‖	.577	Fruits in group III	.200
		Fruits in group IV	.300
		Fruits in group V	.400
		Fruits, dried (all kinds)*†§‖	.888
		Dried beans*†	1.201
		Potato chips‡‖	.918

* Values from Sherman.
† Values from Schall.
‡ Values from present study.
§ Values from Keith and Whalen.
‖ Values from McCance, Widdowson and Shackleton.
¶ Data too divergent to present an average.
** Values from Fellers and Smith.

amin chloride is given daily as a supplement. The requirement of vitamin C probably is met by the orange juice, while that for vitamin B_2 seems to be covered fully by the milk, eggs, cheese, and green vegetables.

Supplementary data on the content of potassium which are needed to prepare an adequate diet are given in tables 2 to 5 inclusive. The method of dividing the foods listed in table 1 into three meals for one day is given in table 6. One milligram of thiamin chloride must be taken daily.

All foods should be weighed or measured with care. Salt may be used in generous amounts particularly in seasoning the specially cooked foods. Pepper and vinegar are permitted in moderation. White sugar may be used liberally in beverages, on cereal and on fruits.

TABLE 5

Classification of cereals according to potassium content, expressed in grams per 100 gm.

GROUP I RANGE, 0.05–0.15 AVERAGE, 0.1	GROUP II RANGE, 0.2–0.4 AVERAGE, 0.3
Corn Flakes	Corn-meal
Cream of Wheat	Grape Nuts
Farina	Oatmeal
Puffed Wheat	
Rice, polished	
Puffed Rice	
Rice Krispies	

Candy is permissible provided it contains no brown sugar, chocolate, nuts, cocoanut, molasses or fruit. Salads and desserts may be prepared from gelatin either plain or flavored. Carbonated beverages, ginger-ale and Coca-Cola, synthetic fruit drinks made from beverage powders, crystals or liquids, may be

taken in the quantity desired. Any one of these beverages may serve as a carrier for the extra salt usually prescribed. Directions for the preparation of a pleasing drink containing the prescribed amount of sodium and chloride are given on page 770.

Foods to be strictly avoided because of a relatively high content of potassium include the following: whole grain cereal products, bran, soups, broths, and gravies containing meat stock or meat extracts, chili sauce, mustard, meat sauce and other seasonings, nuts, dried fruit, dried legumes, molasses, coffee, Postum, tea, and chocolate.

The appetite of patients with Addison's disease is notably fickle; therefore, it is highly important that the food served be attractive and varied. With the pre-

TABLE 6

Division of food listed in table 1 into three meals

FOOD	GM.	APPROXIMATE MEASURE
For breakfast, the following foods or permitted substitute:		
Fruit from group III, preferably raw*	100	1 average-sized serving
Cereal from group I†	15	1 average-sized serving
Egg	50	1
Bacon	10	2 small strips
Bread, white (may be toasted)	30	1 slice
Butter	10	1 square
Cream	90	⅓ cup, scant
For second meal, the following foods or permitted substitute:		
Meat, specially cooked‡	75	1 fairly large serving
Potato, specially cooked‡	100	1 serving (½ cup)
Vegetable from group I§	100	1 serving (½ cup)
Bread, white	30	1 slice
Butter	20	2 squares
Fruit from group II*	100	1 serving (½ cup)
Cream	30	2 tablespoons
Milk	200	1 glass
For third meal, the following foods or permitted substitute:		
Egg	50	1
Rice (weighed dry)	25	1 serving (½ cup)
Vegetable from group IV, preferably raw§	100	1 serving
Mayonnaise	15	1 tablespoon
Bread, white	30	1 slice
Butter	20	2 squares
Fruit from group II*	100	1 serving (½ cup)
Cream	30	2 tablespoons
Cheese	20	1 cubic inch
Milk	100	½ glass

* *See* tables 3 and 4 for choice of fruit.
† *See* table 5 for choice of cereal.
‡ *See* pages 769 and 770.
§ *See* tables 2 and 4.

viously given plan[2] as a basis and by using the permitted substitutions which follow, appetizing menus can be prepared.

SUBSTITUTIONS PERMITTED

One of the following foods in the quantity stated may be substituted for foods named:

	Gm.	Approximate measure
Substitutions for 100 gm. of fruit in group III:*		
1. Fruit from group I	265	1⅓ cup
2. Fruit from group II	160	¾ cup
3. Fruit from group IV	65	⅓ cup
4. Fruit from group V	50	¼ cup
5. Vegetable from group I	265	1⅓ cup
6. Vegetable from group II	160	¾ cup
7. Vegetable from group III	100	½ cup
8. Vegetable from group IV	65	⅓ cup
9. Vegetable from group V	50	¼ cup
Substitutions for 100 gm. of specially cooked potato:*		
1. Vegetable from group I	165	¾ cup
2. Vegetable from group II	100	½ cup
3. Vegetable from group III	65	⅓ cup
4. Vegetable from group IV	40	¼ cup, scant
5. Fruit from group I	165	¾ cup
6. Fruit from group II	100	½ cup
7. Fruit from group III	65	⅓ cup
8. Fruit from group IV	40	¼ cup
9. Fruit from group V	30	⅛ cup
Substitutions for 100 gm. of vegetables in group I:*		
1. Vegetable from group II	60	¼ cup
2. Vegetable from group III	40	¼ cup, scant
3. Vegetable from group IV	25	⅛ cup, scant
4. Fruit from group I	100	½ cup
5. Fruit from group II	60	¼ cup
6. Fruit from group III	40	¼ cup, scant
Substitutions for 100 gm. of fruit in group II:*		
1. Fruit from group I	165	¾ cup
2. Fruit from group III	65	⅓ cup
3. Fruit from group IV	40	¼ cup, scant
4. Fruit from group V	30	⅛ cup
5. Vegetable from group I	165	¾ cup
6. Vegetable from group II	100	½ cup
7. Vegetable from group III	65	⅓ cup
8. Vegetable from group IV	40	¼ cup, scant

[2] *See* table 6.

* One average-sized serving, about ½ cup.

	Gm.	Approximate measure
Substitutions for 100 gm.* of vegetables in group IV:		
1. Vegetable from group I	400	2 cups
2. Vegetable from group II	240	1¼ cup
3. Vegetable from group III	150	⅔ cup, scant
4. Vegetable from group V	75	⅓ cup
5. Fruit from group I	400	2 cups
6. Fruit from group II	240	1¼ cup
7. Fruit from group III	150	⅔ cup
8. Fruit from group IV	100	½ cup
9. Fruit from group V	75	⅓ cup
Substitutions for 25 gm.* of dry rice:		
1. Bread, white	15	½ slice
2. Macaroni, cooked	50	¼ cup
3. Spaghetti, cooked	50	¼ cup
4. Noodles (without eggs), cooked	50	¼ cup
Substitutions for 15 gm.* of cereal in group I:		
1. Bread, white	15	½ slice
2. Cereal from group II (When this substitution is made, 1 slice of bread must be omitted)	15	⅓ cup
Substitutions for 1 egg:		
1. Canned crab	30	1 small serving
2. Canned shrimp	60	1 average-sized serving
3. Canned salmon	25	1 large tablespoon
4. Sardines, canned in oil	15	1 sardine 3 inches long
5. Fish (cooked in any manner)	25	1 small serving
6. Oysters, large	50	3 or 4
7. Cheese (all kinds)	40	2 cubic inches or ¼ cup
8. Milk	50	¼ glass
9. Meat, cold sliced	20	1 small serving

Substitutions for specially cooked meat:

One egg is equivalent in content of potassium to 75 gm. (1 serving) of specially cooked meat. Therefore, any one of the egg substitutes may be taken in place of the meat.

Substitutions for milk:

1. Cream sauce for vegetables and meat may be taken provided an equal portion of milk is omitted.
2. Cream vegetable soup may be taken provided equal portions of milk and vegetable are omitted.
3. Ice cream (vanilla flavor) may be taken provided an equal portion of milk or cream is omitted.

Substitutions which can be made in order to use potato, either baked or cooked in the ordinary manner:

1. 100 gm. (1 medium-sized) potato, baked or cooked in the ordinary manner may be taken provided the following are omitted from the day's food allowance: 200 gm. (1 glass) of milk, 1 egg and 100 gm. (1 serving) of specially cooked potato.
2. 100 gm. (1 medium-sized) potato, baked or cooked in the ordinary manner may be taken provided the following are omitted from the day's food allowance: 100 gm. (1 serving) vegetable from group IV, 1 egg and 100 gm. (1 serving) of specially cooked potato.
3. 50 gm. (½ medium-sized) potato, baked or cooked in the ordinary manner may be taken provided the following are omitted from the day's food allowance: 100 gm. (½ glass) of milk and 100 gm. (1 serving) of specially cooked potato.
4. 15 gm. potato chips (10 pieces) may be taken provided the following is omitted from the day's food allowance: 100 gm. (1 serving) of specially cooked potato.

Substitutions which can be made in order to use meat and fish, cooked in the ordinary manner:

1. 100 gm. (1 large serving) meat or fish, broiled, baked, fried or roasted, may be taken provided the following are omitted from the day's food allowance: 200 gm. (1 glass) of milk and 75 gm. (1 serving) of specially cooked meat.
2. 50 gm. (1 medium-sized serving) meat or fish, broiled, baked, fried or roasted, may be taken provided the following are omitted from the day's food allowance: 100 gm. (½ glass) of milk and 75 gm. (1 serving) of specially cooked meat.

Substitutions permitted so that baked products and desserts may be served:

1. One baking powder biscuit, 2 inches (5 cm.) in diameter, may be taken provided 1 slice of bread is omitted from the day's food allowance.
2. One four-section waffle may be taken provided 1 egg, 1 slice of bread and 1 serving of cereal or rice are omitted from the day's food allowance.
3. One muffin, plain wheat or corn-meal, may be taken provided 1 slice of bread and ¼ glass of milk are omitted from the day's food allowance.
4. One average-sized doughnut may be taken provided ½ slice of bread is omitted from the day's food allowance.
5. One piece (3½ inches or 8.87 cm. across outer edge) of double crust pie with any fruit or substitute from group II, may be taken provided 1 slice of bread and 1 serving of fruit from group II are omitted from the day's food allowance.
6. One piece (3½ inches or 8.87 cm. across outer edge) of pumpkin, lemon, pineapple cream, or custard pie with meringue, may be taken provided 1 egg, ½ slice of bread and 1 serving of fruit from group II are omitted from the day's food allowance.
7. One serving (½ cup) of plain custard, cream tapioca, bread, rice or corn-starch pudding may be taken provided 1 egg and 1 serving of fruit from group II are omitted from the day's food allowance.
8. One piece (2 x 2 x 1½ inch or 5 x 5 x 3.8 cm.) of plain white, butter or sponge cake with plain white frosting may be taken provided 1 slice of bread is omitted from the day's food allowance.
9. One piece of two-layer chocolate cake (2½ inches or 6.27 cm. across the outer edge) may be taken provided 1 serving of fruit from group II is omitted from the day's food allowance.
10. One piece of angel food cake (2½ inches or 6.27 cm. across the outer edge) may be taken provided 1 serving of fruit from group II is omitted from the day's food allowance.

The products and desserts listed may be made according to any standard recipe. The phosphate baking powders such as Calumet, Rumford, or K.C.

should be used. The tartrate baking powders such as Royal, must be strictly avoided.

DIRECTIONS FOR THE SPECIAL COOKING OF VEGETABLES

Peel vegetables, such as potatoes, turnips, and rutabagas, and cut into small pieces about $\frac{3}{4}$ inch (1.9 cm.) square and $\frac{1}{8}$ inch (0.31 cm.) thick. Shred cabbage, spinach and other leaf vegetables. Break cauliflower into flowerets and partially quarter the flowerets, that is, split crosswise at the bud end. Partially quarter Brussels sprouts. Cut string beans and asparagus into $\frac{1}{2}$ inch pieces (1.27 cm.). For cooking use a deep narrow kettle rather than one that is wide and shallow. After the preliminary preparation plunge vegetables into boiling salted water, and cook gently using $1\frac{1}{2}$ teaspoons of salt for each quart of water.

The proportion of water to vegetable as well as the approximate length of cooking for each vegetable are given in table 7. After draining, gently heat over the flame until dry and season generously with salt and with butter, cream or white sauce.

When cooking beets, corn and tomatoes, tie in moistened parchment paper, immerse in boiling water and cook for the length of time specified in table 7. After removing from the parchment bag, season generously with salt and butter.

TABLE 7

Table for special cooking of vegetables

VEGETABLE	AMOUNT	WATER	TIME	HOW COOKED
	cups	*cups*	*minutes*	
1. Asparagus	1	8	10	Uncovered
2. Cabbage	1	8	10	Uncovered
3. Cauliflower	1	8	10	Uncovered
4. Spinach	1	8	10	Uncovered
5. Brussels sprouts	1	8	10	Uncovered
6. Broccoli	1	8	10	Uncovered
7. Onions	1	6	30–40	Uncovered
8. Peas	1	6	20–30	Uncovered
9. String beans	1	8	20–35	Covered
10. Carrots	1	6	Young, 25 Old, 30–40	Covered
11. Kohlrabi	1	6	30–40	Covered
12. Turnips	1	6	25–30	Covered
13. Parsnips	1	6	25–30	Covered
14. Rutabagas	1	6	25–30	Covered
15. Potato	1	6	15–25	Covered
16. Squash	1	6	20–30	Covered
17. Pumpkin	1	6	20–30	Covered
18. Beets	1	6	40	In parchment paper
19. Corn	1	6	30	In parchment paper
20. Tomatoes	1	6	30	In parchment paper

DIRECTIONS FOR SPECIAL COOKING OF MEAT

The palatability of less tender cuts of meat is improved by this procedure but the selection need not be limited to them. Sear the meat, cut into small pieces about ½ inch (1.27 cm.) square and ¼ inch (0.63 cm.) thick, and transfer to a sheet of moistened parchment paper.[3] With white string tie the paper into the form of a bag and immerse the bag in boiling, salted water using the proportion of 1 part of meat to 8 parts of water. Example: for ½ cup of cubed meat, use 4 cups or 1 quart of water (1000 cc.); for each quart of water use 2 teaspoons of salt. Simmer (cook just below the boiling point) for two hours. The bag must be under water during the entire cooking period. Evaporation can be prevented to a large extent by using a covered kettle but in case of loss of water the amount lost should be replaced.

At the end of two hours remove the bag from the water, cut the string and empty contents into a convenient utensil. The juice should be served with the meat.

Serve the specially cooked meat with a white sauce or in salads, sandwiches, omelets, croquettes, stews or meat pies. White sauce may be substituted for an equal portion of milk. Variety can be obtained by adding chopped ripe olives to creamed ham, by adding curry powder (with discretion) to a lamb stew, and by cooking garlic for a few minutes in the pan with pork and then removing it.

[3] Parchment paper (Patapar) in the 25-pound weight may be secured from the Paterson Parchment Paper Company, Bristol, Pennsylvania. It is very important to secure the 25-pound weight because the paper usually on the market is heavier and unsatisfactory.

DIRECTIONS FOR THE PREPARATION OF SPECIAL GRAVY

Water, boiling	1 cup
Browned flour	3 tablespoons
Fat (bacon fat, butter or butter substitutes)	3 tablespoons
Salt	1 teaspoon
Bay leaf, if desired.	
Cloves, if desired.	

Mix the flour with ¼ cup cold water to form a smooth paste. Add gradually to the hot water, stirring and cooking until the sauce is thickened and the starch is cooked. Add the fat and seasonings and cook one minute longer. Strain before serving.

The browned flour is prepared as follows: spread flour in a thin layer on a flat surface. Bake in a hot oven stirring occasionally until evenly browned throughout. This may be made in quantity and used as needed for special gravy. The color may be light or dark as preferred. The thickening power will vary accordingly.

DIRECTIONS FOR THE PREPARATION OF A DRINK CONTAINING SALT

One quart will provide the amount of sodium and chloride usually prescribed per day in the treatment of Addison's disease.

	Gm.	*Approximate measure*
Beverage powder*	90	½ cup
Sodium chloride (table salt)	10	2 teaspoons
Sodium citrate	5	1 teaspoon
Water to make 1 quart (1000 cc.). Serve ice cold.		

* A satisfactory beverage powder is Ariston Bever-ade sold by the Calumet Tea and Coffee Company, 409–411 West Huron Street, Chicago, Illinois. This product is recommended only for patients who have Addison's disease.

SAMPLES OF LOW POTASSIUM MENUS INCLUDING PERMITTED SUBSTITUTIONS[4]

MENU 1

Breakfast

	Gm.
Grapefruit	100
Cornflakes	15
Cream	50
Toast	30
Butter	10
Bacon	10

Lunch

	Gm.
Cheese (in omelet)	20
Buttered new asparagus	100
Small hard roll	15
Butter	20
Strawberry (in shortcake)	100
With whipped cream	25

Dinner

	Gm.
Veal cubes (specially cooked) in sour cream	75
	50
Baked potato	100
Buttered carrots	50
Sliced tomato	50
Mayonnaise	15
White bread	30
Butter	20
Fresh peaches (with tapioca)	65
Milk	100
Cream	75

Explanation of menu 1: Lunch:

1. The omelet consists of cheese, listed for the third meal (table 6) and an egg substituted for the specially cooked meat.
2. The roll is substituted for the rice, listed for the third meal (table 6).
3. The shortcake consists of a baking powder biscuit substituted for the slice of bread, fresh strawberries (group II) and whipped cream.

Explanation of menu 1: Dinner:

1. Specially cooked cubes of veal are browned and cooked in sour cream.
2. The baked potato is substituted for the specially cooked potato listed for the noon meal, 1 glass of milk and the egg listed for breakfast (table 6).
3. The fresh peach (group III) is substituted for the fruit from group II (table 6).

MENU 2

Breakfast

	Gm.
Orange juice	100
Waffle—mock maple syrup	
Butter	10
Bacon	10

Lunch

	Gm.
Chicken (specially cooked)	75
Salad	
Lettuce	20
Celery	15
Tomato	30
Mayonnaise	15
Hot biscuit	
Butter	20
Lemon Jello	
Milk	100
Cream	75

Dinner

	Gm.
Tenderloin steak	100
Mashed potato (specially cooked)	100
Brown gravy (specially cooked)	
Buttered cauliflower	75
White bread	15
Butter	20
Celery hearts	25
Apple pie	
Cheese	20

Explanation of menu 2: Breakfast:

1. The waffle is substituted for the cereal and toast (table 6).
2. Mock maple syrup can be made from caramelized cane sugar, water and synthetic maple flavor.

Explanation of menu 2: Lunch:

1. The lettuce, celery and tomato from group IV are substituted for the serving of

[4] *See* tables 1 and 6 for menu plan; tables 2 and 3 for grouping of vegetables and fruits; and pages 766 to 768 inclusive for permitted substitutions.

vegetables from group I and the serving of fruit from group II.
2. The hot baking powder biscuit is substituted for the slice of bread.

Explanation of menu 2: Dinner:

1. The steak is substituted for an egg and 1 glass of milk.
2. The potato is transferred from the noon meal and includes butter and cream taken from the day's allowance.
3. The apple pie is substituted for the serving of fruit from group II and 1 slice of bread.

Only those foods and food accessories listed on the diet should be given. No substitutions other than those listed should be made unless it is known that the potassium content of these does not exceed the potassium content of the food for which they are to be substituted.

Special precautions are necessary to avoid unwitting additions of potassium. In the treatment of complications of Addison's disease, anemia for example, liver extract is frequently prescribed. Lederle's concentrated solution of liver extract put up in ampules of 1 cc. each was found to contain 1 mg. of potassium per ampule. Other extracts of liver may contain larger amounts. Lederle's was the only one analyzed for content of potassium. One capsule of Cupron was found to contain 0.4 mg. of potassium.

Patients for whom a diet restricted in potassium is prescribed must receive thorough instructions. The features of an adequate diet as well as the reasons for restricting potassium should be explained. The methods of special preparation of food, the use of the food tables and the lists of permissible substitutions must be made perfectly clear. The adequately instructed patient will be able not only to plan and prepare satisfactory and varied menus in his home but also to make a correct selection of food when he is away from home.

SUMMARY

A diet restricted in potassium is desirable in the treatment of Addison's disease. A plan for the construction of such a diet adequate with respect to calories, protein, minerals and vitamins has been presented. Included also is a method of special cooking for the reduction of potassium in vegetables and meats. Sample menus incorporating permitted substitutions have been included to show that varied and attractive meals can be served in spite of the limitations imposed by the restriction of potassium.

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ANNUAL REPORTS 1937-1938 AND PROCEEDINGS MILWAUKEE MEETING[1]

President's Report

The activities of your president for this past year have been so pleasant that it is difficult to think of them as work. A five weeks' trip through the Middle-West and South during March and April was a glorious event for the traveler, affording, as it did, opportunity to meet many professional friends and newer acquaintances. This trip included attendance at six state meetings, Kansas, Ohio, Kentucky, Indiana, Alabama and Texas; also the joint meeting of the Tri-State Hospital and the Tri-State Dietetic Associations which met at Columbia, South Carolina. A most interesting day was spent en route with the Oklahoma City Association and on the return trip your president, with other visiting guests, attended a luncheon given by the Kansas City group.

Last January a trip was made to Milwaukee in company with our publicity chairman and business manager, to meet with the local group and perfect plans for the Annual Meeting. On the return trip, the publicity chairman and your president stopped off in Battle Creek for a dinner meeting of the Western Michigan Dietetic Association.

Another most enjoyable event was the meeting with the Canadian Dietetic Association at Ottawa in June. It was inspiring, indeed, to see the progress that is being made by our sister association across the border.

In addition to the above meetings with our own professional groups, it was my pleasure to attend the meetings of several other allied groups—the American Public Health Association, Women in Public Health, the American Nursing Association, the Kansas Home Economics Association, the Seventh International Management Congress held in Washington, D. C., and the American Restaurant Association.

I am glad to report that our Association has been well represented at many other national and state meetings by our president-elect, business manager, other members of the Executive Committee, certain members appointed as representatives of the Association and by the exhibit chairman, Marietta Eichelberger. In several instances, we were represented by our exhibit and by local members. We are indeed grateful to these members for their cooperation and assistance. Altogether, our Association has been officially represented at 15 national organizations' meetings and 16 state and local associations' meetings.

We have cooperated on joint projects with other associations such as the American Home Economics Association and the Conference of Food Service Directors.

One of the outstanding accomplishments of the year has been the editorial work resulting in four additional numbers of our JOURNAL, the quality of which we can indeed be proud. Now that we have a monthly journal, we are in line with other professional and scientific journals.

Section and committee chairmen have worked assiduously and reports of their work will be given later. It does seem appropriate, however, to call attention to a few of these activities. Many state and local groups, as well as individual members, have cooperated in collecting the quantity recipes, of which there are more than a thousand and which are now almost ready for the printer. The outline for the teaching of foods, nutrition and diet therapy to nurses, based on the *Curriculum Guide for Schools of Nursing*, has also been completed and will meet a long-felt want by those engaged in the teaching of nurses.

A survey of the dietitian and her job has already revealed many things of interest to

[1] The American Dietetic Association, Milwaukee, October 8–14, 1938.

us and will prove most helpful in acquainting other professional groups with our work. There is need, however, of continuing this study and it is hoped others may add to our fund of information by filling out the questionnaire.

Much progress has also been made this past year in acquainting the public with our work through the radio and through newspaper and magazine articles.

To the members of the Executive Committee, to the business manager, and to the editor of the JOURNAL, all of whom have been most cooperative, as well as to the chairmen of committees, the president expresses her profound thanks.

To the membership at large, who bestowed upon her the great honor of the presidency of the Association, she expresses her deep appreciation. May the presidents of the future receive the same hearty support and inspiration that have been accorded that office this year!—LENNA F. COOPER, *Chief, Department of Nutrition, Montefiore Hospital, New York City.*

President-Elect and Affiliation Chairman

It would appear that the report of your president-elect and affiliation chairman is going to be somewhat negative when the first statement is that only one additional affiliation was made this year. However, note that the total of affiliated state associations is now 34, leaving a possibility of only 14 more. Of the 14, three states have organizations with affiliation fairly near at hand. In some of the remaining 11, the problems of population limit the possibilities for a state organization very materially. Our one territorial association, Porto Rico, deserves mention by name. But we will have to allow Kansas, the one state to have been affiliated in 1938, to take the bow alone this year.

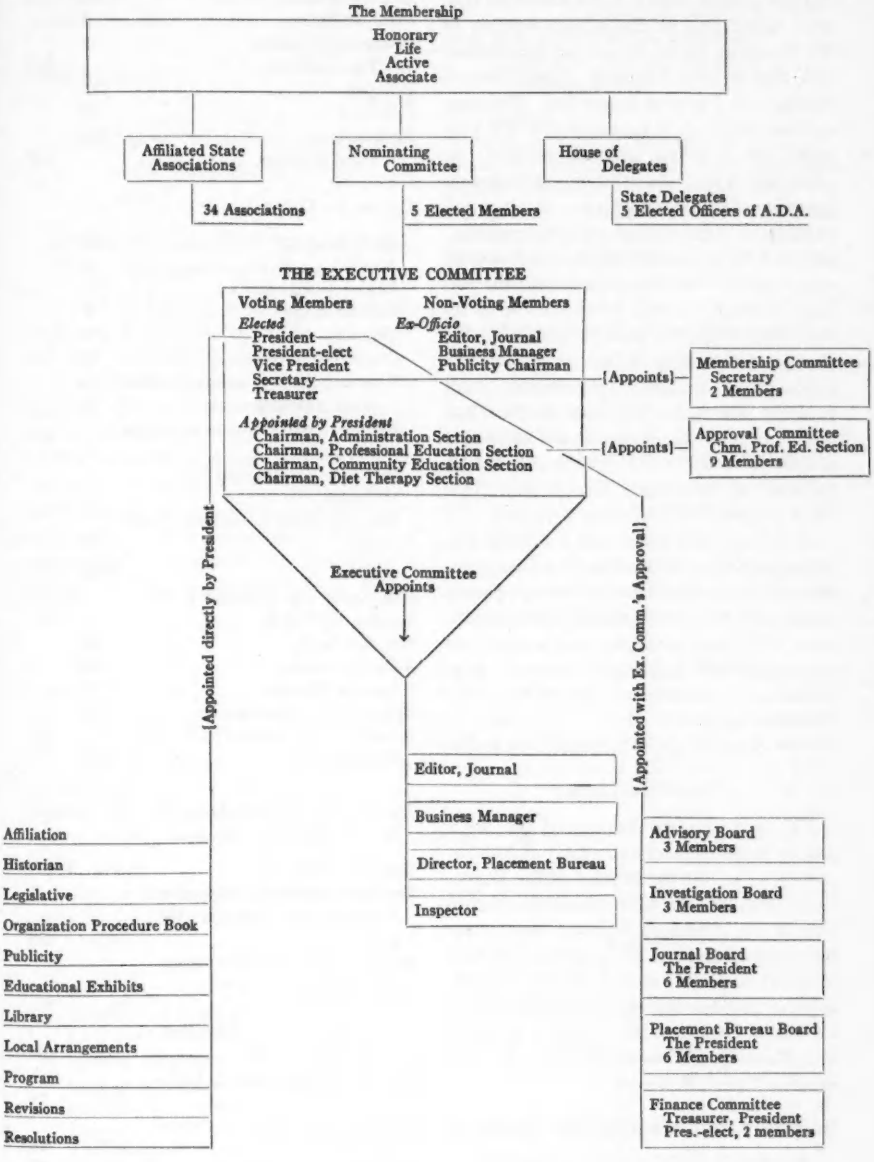
Considered from the standpoint of group affiliation, the work of your chairman becomes less and less each year. But considered from the standpoint of a "training course" for the president-elect, the work with state groups assumes its greatest significance. The close association with state organizations and officers either by visits or by correspondence has given your president-elect an opportunity to know the problems of state groups, and to have a share in their solving; to realize the desire of state memberships to build effective organizations; and to know personally the many splendid members serving their professional association by acting as state officers. All this experience should prove to be of real value in the year ahead.

In visiting state groups in this and other years, and by analyzing correspondence, your affiliation chairman is impressed by the similarity of problems that give concern to all states except possibly the ones with large memberships and those long affiliated with the American Dietetic Association. It may be comforting to officers to know that their own state is not alone in feeling that it is "so far away from the center of things"; that the "members are scattered over so large a territory"; that "we are so highly organized in this state"; and that practically every group feels that it needs "inspiration", "instruction as to how to build a good program of work" and a "new approach to setting up a program for our annual meetings".

In order that the impression may not be left with you that your chairman found only problems in her travel and correspondence, she would like to go on record with this statement: state organizations are becoming perfected; the machinery for handling state programs of work is moving with a fair amount of ease; the prestige of the national Association is increasing and will continue to develop with the increasing effectiveness of state associations. This increasing effectiveness has resulted in closer and more effective relationships with the Association's Business Office. This is a desirable accomplishment.

A few statistics are in order. Your affil-

ORGANIZATION OF THE AMERICAN DIETETIC ASSOCIATION, SEPTEMBER 1938



iation chairman visited three state associations and represented the American Dietetic Association at the annual meeting of the American Home Economics Association and that of the American Association of Health and Physical Education. She sent out five letters to state presidents and prepared the following graphic material: an affiliation map; Association membership growth; membership by states; occupational analysis of membership; and the organization of A.D.A. An exhibit of state bulletins and programs was also prepared for the Annual Meeting. It will be of interest to record that $805 has been refunded by the Business Office to state associations through June, 1938, on A.D.A. membership dues paid by March 1. The sum of $115 has been sent to certain states, as allowances for notices of vacancies for dietitians sent in by members of these state associations. One state returned the allowance thus sent.

With work well under way for perfecting the organization of the House of Delegates, and with state organizations becoming more closely allied with the national organization, your affiliation chairman sees a desirable increase in the individual member's participation in and responsibility for the Association's progress.—ANNA M. TRACY, *Florida State College for Women, Tallahassee.*

Vice-President

The vice-president has served the Association as coordinator and editor of Association reports. At the request of the Executive Committee she wrote an article descriptive of the American Dietetic Association for publication in *American and Canadian Hospitals* under the section entitled "Standards for the Hospital and Those Working in its Special Departments."—BEULA B. MARBLE, *Huntington Memorial Hospital, Harvard Medical School, Boston.*

Secretary and Membership Chairman

Membership as of September 1, 1937, 3422

Active Members	519	
Associate Members	47	
Life Members	3	
Reinstatements	94	
State Affiliations	2	
Honorary Members	1	
Total increase		666
Dropped	225	
Deceased	3	
Resignations	101	
Total decrease		329

Reasons for Resignations:

No reason	36	
Married	32	
Discontinued dietetics	13	
Further study	6	
Finances	3	
Household duties	3	
Teaching home economics instead of doing dietetic work	2	
Unable to participate even in local association	2	
Moved to foreign country	2	
Ill health	1	
Not even time to read the JOURNAL	1	
Total	101	
Membership as of September 1, 1938		3,759
Increase 1937–1938		337
Life Members	64	
Affiliated States	34	
Honorary Members	9	
Rejections for Membership	75	
Transfers from Associate to Active Membership	30	

The American Dietetic Association, Occupational Analysis, February 1, 1938

Hospital Dietitians	62⅓%	2,348
Nutrition Advisers, Extension Workers, etc., serving the public	5¼%	198
Members of Home Economics and Nutrition Departments—Teachers	8%	281
School Lunch and College Dormitory Food Service	5½%	209
Tea Room, Restaurant, Cafeteria, etc.	2¼%	78
Nutrition Advisers to commercial firms	2½%	96
Food Editors and Writers	¾%	27
Research	¼%	14
Consultants	1%	44

Miscellaneous	½%	13
Housewives	6%	233
Unknown	5%	193
	100%	3,734
Affiliated States		34
		3,768

—RUTH M. KAHN, *Washington University Medical School Clinics, St. Louis.*

Treasurer and Chairman of the Finance Committee

A brief explanatory summary of the audit as shown in detail in the auditor's report of the year 1937–1938 is given herewith.

As usual, the Finance Committee met in January 1938 and prepared a tentative budget which was presented to the Executive Committee at its mid-year meeting. After the end of the fiscal year, the committee met and prepared a tentative budget for 1938–1939 which will be presented to the new Executive Committee for approval.—SARAH ELKIN BRAUN, *Consulting Dietitian, Evanston, Illinois.*

Auditor's Condensed Report[1]

Chicago, September 14, 1938

MRS. SARAH ELKIN BRAUN, Treasurer,
The American Dietetic Association
Chicago, Illinois

Dear Madam:

We have made an examination of the accounts and financial records of The American Dietetic Association, an Illinois corporation not for pecuniary profit, for the purpose of reporting upon its financial condition as at August 31, 1938, and the results of its operations for the year ended at that date.

Comments on Income and Expenses

The excess of income over expenses for the year ended August 31, 1938, was $750.12 as compared with $3,900.17 for the preceding year, a less favorable showing of $3,150.05.

A summary of the gross income, expenses and net income for the year under review, and a comparison with the net income of the preceding year follows:

[1] A condensed summary of points covered of general interest only appears here. A complete record is on file in the Business Office.

	Income	Expenses	Net Income Current Year	Net Income Preceding Year
Operating	$22,533.36	19,777.93	2,755.43	1,643.88
Journal	9,374.80	13,611.92	4,237.12*	569.70*
Annual Meeting	9,965.90	7,695.09	2,270.81	2,851.99
Non-Recurring		39.00	39.00*	26.00*
	$41,874.06	41,123.94	750.12	3,900.17

Following is a comparison in somewhat more detail of the income and expenses for the years ended August 31, 1938 and 1937:

	Year ended August 31, 1938	August 31, 1937	Increase Decrease*
Income			
Membership Dues, Net	$18,502.50	16,153.00	2,349.50
Placement Bureau	3,319.50	2,990.00	329.50
Interest Received	321.25	221.25	100.00
Sales of Miscellaneous Publications	377.18	280.93	96.25
Miscellaneous Income	12.93	3.51	9.42
Journal	9,374.80	7,177.82	2,196.98
Annual Meeting	9,965.90	11,077.50	1,111.60*
	$41,874.06	37,904.01	3,970.05

Expenses	Year ended August 31 1938	August 31, 1937	Increase Decrerse*
Administrative	1,741.35	1,478.12	263.23
Section Committees	94.68	157.92	63.24*
Standing Committees	1,494.30	1,810.58	316.28*
Placement Bureau	323.26	159.69	163.57
Miscellaneous Publications	207.22	136.71	70.51
Business Office	14,401.52	13,060.67	1,340.85
Miscellaneous Operating Expense	1,515.60	1,201.12	314.48
Journal Expense	13,611.92	7.747.52	5,864.40
Annual Meeting	7,695.09	8,225.51	530.42
Non-Recurring Expenses	39.00	26.00	13.00
	$41,123.94	34,003.84	7,120.10
Excess of Income over Expenses	$750.12	3,900.17	3,150.05

The increase of $2,349.50 in membership dues, as shown on the foregoing page, resulted from an increase of $1,357.50 in gross dues billed (due to an increase in membership) plus a decrease of $992 in dues charged off for members dropped, resigned, and deceased.

Placement Bureau income increased $329.50 as compared with the preceding year, and the expense of this department increased $163.57, making a net improvement of $165.93. The increase in expense is due mainly to the fact that the bureau did no advertising in the previous year, while $148 was spent for that purpose in the year ended August 31, 1938.

As in prior years, JOURNAL income includes only income from non-member subscriptions, advertisers, and reprint sales, and includes no portion of membership dues, although some part of such dues collected from members is, in reality, in payment for the JOURNAL; likewise, the JOURNAL expenses do not include any portion of the Business Office expenses which are necessarily incurred in the handling of subscriptions. On this basis the publication of the JOURNAL during the year resulted in a loss of $4,237.12 as compared with a loss of $569.70 in the preceding year.

During the year ended August 31, 1938, eight issues of the JOURNAL were published as compared with six issues published during the previous year. The fact that income was not increased sufficiently to offset the increased expense accounts for the less favorable showing in the current year.

During the current year a special advertising representative was employed at a cost of $2,208.67. No corresponding expense was incurred in the previous year.

The net profit on the Annual Meeting held in October, 1937, at Richmond, Virginia, amounted to $2,270.81, as compared with a profit of $2,851.99 on the previous Annual Meeting held at Boston, Massachusetts, or a decrease of $581.18.

Expenses of standing committees decreased $316.28. In this connection it should be mentioned that in order to avoid comparatively large fluctuations from year to year in hospital inspection expense, a reserve of $1,000 has been created by charges to hospital inspection expense in the current year. This provision is estimated to be sufficient to cover one-half of the expense to be incurred in the following year.

Marketable Investments—$8,285

The following bonds are held as investments of the general fund:

Par Value		Market Value August 31, 1938	Book Value
$1,000	Illinois Power and Light—First and Refunding Mortgage Bond, Series A, 6%, due April 1, 1953	$995	945
2,000	United States Treasury Notes—1¼%, due June 15, 1940	2,045	2,020
7,000	United States of America Savings Bonds—Series C, Issued March 1, 1937, and due 10 years thereafter	5,320	5,320
$10,000		$8,360	8,285

We examined the above bonds in the vaults of the Michigan Boulevard Safe Deposit Company on September 2, 1938. All interest coupons falling due during the year were properly accounted for. The securities are carried in the accounts at cost with the exception of U. S. Savings Bonds which are carried at surrender value as at August 31, 1938.

Life Membership Fund Assets

Cash in Bank—$775

This amount is deposited in the general bank account but is set aside in the books as an asset of the life membership fund.

Investments—$2,800

The following bonds are held as investments of the life membership fund:

Par		Market Value August 31, 1938	Book Value (Cost)
$500	Illinois Power and Light Corporation—First and Refunding 6%, due April 1, 1953, Interest April and October 1	$495	500
1,000	North American Light and Power Company—5½%, due July 1, 1956, Interest January and July 1	885	1,000
1,000	Kansas Power Company—5% Gold Bond, due March 1, 1947, Interest March and September 1	1,015	1,000
300	U. S. Treasury Bonds—3¼%, due March 15, 1956, Interest March and September 15	340	300
$2,800		$2,735	2,800

We examined the above bonds in the vaults of the Michigan Boulevard Safe Deposit Company on September 2, 1938. All interest coupons falling due during the year were properly accounted for. At a meeting of the Executive Committee held in January 1937, it was voted that an effort be made to sell at cost all of the above securities except U. S. Treasury Bonds, and reinvest the proceeds in U. S. Savings Bonds, but so far the bonds have not been sold.

Net Worth—$13,332.20

The net worth account was increased during the year by the sum of $750.12, representing the excess of income over expenses.—SCOVELL, WELLINGTON & COMPANY, *Chicago*.

Business Manager

The Executive Committee has placed the responsibility for JOURNAL subscriptions, part of the JOURNAL advertising, the business aspects of the Annual Meeting, and the Placement Bureau, in the Business Office.

Journal. The number of non-member subscribers increased from 680 to 840. There was a total of 141 pages of paid advertising in the 8 issues of the JOURNAL appearing in 1937–1938 as compared with 103½ pages in the 6 issues of the previous year.

Annual Meeting. All of the available space in the hotel in Richmond was sold, a total of 44 spaces.

Placement Bureau. During the year, 367 persons registered in the bureau for the first time; 240 who had previously registered had their names again placed in the active list as being interested in changing positions, making a total of 607 members registering during the year. Of this number approximately one-half were dietitians just completing student training, many of whom were placed immediately either through their college or through the director of an approved training course. During the past year, 194 openings for which members paid a fee were filled through the Placement Bureau.

Equipment. The following equipment was bought this last year: addressograph stand with foot control, desk, five-drawer file cabinet, stenographer's posture chair, bookcase, and typewriter.

General. One of the chief functions of the Business Office is the handling of details for the Executive Committee and for committee members.

The volume of work has increased, of course, with the growth in membership: 3750 members mean 3750 bills, 3750 mem-

bership cards filled in and 3750 returned. It costs approximately $220.00 in postage to bill members and send out membership cards.

This year 584 applications were submitted to the membership committee. Under the present painstaking system of investigating applicants, an average of seven letters is required for each member put on the roster.

In the period from February 1938 through August 1938 about 1400 addressograph plates were made: 201 new members were added, 165 new JOURNAL subscribers, and about 1000 members changed names or addresses or both in these seven months.

From September 1, 1937 through August 31, 1938, 521 stencils were cut and 89,871 sheets mimeographed, divided as follows:

	Stencils	Copies Mimeographed
Administration Section	59	33,885
Community Education Section	36	7,055
Diet Therapy Section	53	9,670
Professional Education Section	67	13,130
General Membership	9	5,062
Committees	159	3,876
Office miscellaneous, including forms for: Placement Bureau, Journal subscriptions, Annual Meeting, etc.	138	17,193

—DOROTHY I. LENFEST.

Journal Editor

Your editor always welcomes the opportunity to tell of her indebtedness, and yours, to those who have so loyally and unselfishly served the JOURNAL during each current year. Whatever merit your JOURNAL may have earned is largely due to the unfailing encouragement and wise council of each succeeding president of the Association, none of whom have overlooked the JOURNAL among her other heavy responsibilities. Your president, Lenna Cooper, has given freely and promptly of her helpful guidance over the many difficult impasses met in the course of the year. The several members of the Journal Board, each in her specialized field, are an unfailing source of assistance. Since papers on research in nutrition comprise the bulk of those submitted, Martha Koehne and Helen Mitchell deserve special mention for their skilled assistance with these. Likewise, credit is due Colleen Cox Hambleton, assistant editor, for the many hours spent culling the scientific literature and assembling the most pertinent in the form of abstracts.

Aside from this, it is difficult to keep a note of apology out of my report—not apology for the JOURNAL but for exposing you to one report that might be omitted. For each issue is in reality a current report and should speak for good or ill regarding the JOURNAL'S status. A formal report, therefore, is in the nature of an anticlimax, and any such report at best can be but a prosaic record of total pages and like details.

Even so, as members of the Association, we may owe you some explanation for having doubtlessly startled you at the beginning of the year with what must have seemed gaudy, if not giddy attire after 12 years' Quaker-like restraint. I refer, of course, to the new cover. In an age dedicated to surface appeal, proper packaging seems more important than ever. The new cover is merely a concession to the demands of the time.

The current volume 14 will probably exceed well over 800 pages. Because of the new two-column format and type size, carrying approximately 616 words to a page in contrast to the 440 words contained in the single column page of previous volumes, this current 800-page volume will be the equivalent of around 1000 pages of the discontinued format. In other words, each issue of the current volume, averaging 80 pages to the issue, calls for fully as much typescript as each issue of volumes 12 and 13, which averaged 100 pages per issue. The 10-issue JOURNAL then, has been effected at no reduction in the actual extent of the printed material per issue. You are getting exactly what we hoped to give you—four extra

copies per year and not at the expense of total words per issue.

Most encouraging of all is that we have been able to publish in this current volume far more papers written by members of this Association. The first two volumes of the JOURNAL in 1925–27, contained around 60 original papers, about half of which were written by doctors or nurses. Ten years later, volume 10 represented the work of 51 authors, 30 of whom were women belonging to our profession. In the current volume, up to and including the November issue, of a total of 100 original articles, 75 have been by members of this Association, or in a very few instances by those who have been exposed and should be eligible to membership. Very soon now we shall be able to say that the Association's JOURNAL, from cover to cover, is not only for, but also by, members of the American Dietetic Association.—MARY P. HUDDLESON.

Investigation Board

The activity of the Investigation Board has been confined to passing on advertising which was submitted by the manufacturers for publication in the JOURNAL. This work has necessarily been done by mail. No instructions or defined policies have been supplied to the Investigation Board with the result that a decision on any given piece of advertising has represented the opinion of the individual Board members. Since certain advertising policies have been questioned by members of the Association, it is recommended that the wishes of the Association concerning advertising policy be studied and defined. It is further recommended that the president provide for such a study.—MARY LOUISE BONE, *Chairman.*

Journal Board

Milwaukee, Wisconsin, October 9, 1938. The meeting was called to order by Mary de Garmo Bryan, chairman, at 1.30 P.M. Board members present were Helen S. Mitchell, Laura Comstock, Estelle Hawley, and Rosalie Godfrey. The president-elect, Anna M. Tracy, and the JOURNAL editor were also in attendance.

Mrs. Bryan asked the editor to present any problems she might have for the decision of the Journal Board. These referred chiefly to the problems of rejection or acceptance of certain papers.

The editor then called attention to the possibility of initiating a students' column in the JOURNAL. A number of people had expressed interest in such an idea. It was the concensus of the Board that students should be encouraged to develop their writing ability and since at present it might be impractical to have a column specifically for the inclusion of student dietitians' contributions, it would be more desirable simply to include any such contributions meeting JOURNAL standards under the Current Comment section. It was suggested that the editor appoint a committee to serve as a clearing house for these papers and that those not suitable for publication in the JOURNAL might be submitted to the editors of state bulletins. Another suggestion presented for further consideration was a special column in which members might have an opportunity to express informally their views on matters pertaining to the profession.

The editor then presented an "Organization Chart," "Outline of Editor's Duties," "Outline of Procedure," and "Style Sheet," for the approval of the Board. The Board agreed to recommend the acceptance of this material to the Executive Committee.

The editor then called attention to the need for a detailed reference sheet for guidance in the matter of terminology. The Board approved the recommendation that a committee be appointed by the editor to assemble such a sheet.

The chair then referred to the tenure of office of the editor and assistant editors. The Board voted to recommend to the incoming Executive Committee that a definite tenure of office, subject to reappoint-

ment, be established for the editor and assistant editors.

The chair then asked for the approval of the Board with regard to the "Outline of Duties of the Journal Board" and the "Summary of Procedure" for inclusion in the Association's Organization Book. It was voted that these be accepted with certain re-wordings in the interests of clarity.

The chair then presented the matter of advertising and asked the editor to outline the JOURNAL policy in this respect with regard to the decisions of the Investigation Board and the final acceptance of copy by the editor. The Board recommended that the editor be an ex-officio member of the Investigation Board.

The chair then stated that the Journal Board should be fully informed with regard not only to the editorial but the administrative policy of the JOURNAL.

The chair then asked the editor for a financial report on the JOURNAL. The editor referred her to the treasurer's report to be read at the Annual Business Meeting. A discussion followed with regard to making a pro rata charge on membership dues toward JOURNAL expenses. It was requested that the Board be routinely informed as to the JOURNAL's financial status.

It was further requested that the Board be fully informed with regard to the decisions of the Investigation Board concerning advertising policy and procedure.

The Board adjourned at 4.00 P.M.

Administration Section

Chairman's Summary

The Bibliography Committee continued under the chairmanship of Evelyn Bangert who reports approximately 180 reviews covering administration, building, equipment (food unit), food, furnishings, personnel and sanitation, in 23 magazines and journals concerned with the dietary and allied fields. Bibliographies have proved to be such an asset in meeting inquiries sent to the Business Office that the work of this committee is particularly far-reaching. Each year's additions to this work continuously enhance its value.

The "Survey of the Dietitian and Her Job", with S. Margaret Gillam as chairman, is a new project. A particularly comprehensive questionnaire was made by Miss Gillam and her committee. In order to encourage the more reluctant to respond, these questionnaires were circulated with code numbers. The contributions numbered about 70 from all sections of the country and from a number of hospitals of varying size, all of which gives an unusually dependable picture of the dietitian and her job.

"Labor Policies in Non-Profit Making Institutions: Dormitories" was continued under the direction of Grace M. Augustine, who did such a complete piece of work with the hospital phase in 1936–1937 (published in this JOURNAL for May 1938). The dormitory survey promises to be equally as valuable as the one made for the hospitals.

"Organization of Typical Dietary Departments" is another carry-over project initiated by Virginia H. Ray, who because of other Association duties could not continue. In reality, this was completed, but the questionnaire used for labor policies in hospitals proved to have material valuable to this closely allied project. These questionnaires, when carefully reviewed, gave a general trend of functional organizations, especially in the "Preparation Service" of the food. The "Food Service" results proved less tangible, seemingly because of the great variation in responsibility of the food service to the patients and the variation in type of service for the general hospital personnel.

"Determination of Life Expectancy of Fixed Kitchen Equipment" was continued by Emma Holloway. This project when first developed was combined with the cost of upkeep. However, institutions having an engineering department whose responsibility is to keep equipment in repair proved to weaken the number of contributions

Therefore the project was given a new set-up, requesting date of installment and life of replaced equipment. The chairman of the Administration Section of each state association was requested to make this a state project along with "Comparative Studies of the Quantity Consumption, Standard Foods" and "Quantity Recipes". The contributions were varied but the compilation of all returns shows especially good data on mixing and dishwashing machines.

"Comparative Studies and Quantity Consumption, Standard Foods" was another project that was given a new set-up for the more common foods, viz: meat, poultry, fish, eggs, milk, sugar, flour and coffee. It seemed possible that the consumption records of these particular products and the support days might be a procedure of all institutions, and data was requested as far back as 1932. As mentioned above, this was made a state project with fairly satisfactory results. It was of especial interest to note the similarity of consumption during not only the consecutive years of each contribution, but also the relative similarity of the figures with regard to each institution, club or school. The average span of four years and more also adds value to this compilation.

"Quantity Recipes", the new and major project, was particularly gratifying as to the number of contributors, the number and variety of recipes, and especially with regard to the cooperation of the chairmen of the administration sections of the state associations. Several of the states did not participate in this project as their plans had been already made for the year. California led with the number of contributors; New York City with the largest group contributions; and the National Hotel Association, Inc., with the largest individual contributions.

The final compilation was made by the dietary staff of Mount Sinai Hospital, New York City. All recipes were re-copied on cards by the staff. Changes were made in the original contribution only in the interests of suitable arrangement of ingredients according to procedure. For accuracy, each recipe was re-checked with the original. Those recipes marked *not re-tested*, if dissimilar to other recipes, of which there were several, were re-tested. Then began the work of comparison and discarding (in the case of recipes which lacked complete procedures or details on volume) in order to avoid duplication. An editing committee composed of Bertha Nettleton of General Foods, Inc., Doris Tisdale of Standard Brands, and Inez Somers of Ward Baking Company, then reviewed the general set-up of the recipes and edited the contents, and the final result reveals that approximately 1200 recipes survived the acid test.

The disposition of this material awaits the final decision of the Executive Committee.—ADELINE WOOD, *Mount Sinai Hospital, New York City.*

Community Education Section

Chairman's Summary

Health education is occupying such a prominent place in our national thinking today, that its importance cannot be too strongly stressed. And let us be reminded that there is no field of knowledge in which the health education of the public is more important than in that of nutrition.

Good health is the rightful heritage of every individual, but cannot *better* health be obtained and much disease prevented by observing good dietary habits?

Health, like culture, progresses proportionately to the manner in which the knowledge acquired by the scientist is interpreted and incorporated into the thinking and daily living of the people. The scientist is not always the best instructor, hence it becomes the responsibility of a trained group of workers to translate his findings in matters pertaining to nutrition to the lay group, thus promoting health and working towards the prevention of disease. It is with this thought in mind that this section has en-

deavored to study quite thoroughly the qualifications, experience and field training necessary for those interested in community health education; the types of material being used for public information and the manner in which it is being presented.

There are five national committees whose reports indicate the accomplishments of each in this field the past year.—HELEN E. WALSH, *State Relief Administration, Los Angeles, California.*

Committee Report

I. *The Community Nutritionist.* The aim of this committee has been to conduct a survey of the field of nutrition and dietetics in social and health agencies and to stimulate interest in the problem of community nutritionists.

In order to ascertain how many dietitians are doing community work, the aid of the chairmen of the community education sections of affiliated state associations was solicited. Questionnaires were sent to 33 people; 7 were returned, giving a total list of 38 people engaged in various types of community work. The group represented workers connected with state and county relief agencies, state, city and county health departments, private agencies such as community houses, child welfare organizations and family welfare, extension services, visiting nurse associations and dairy councils.

The bulletin that the committee had planned to publish this year did not become a reality, but the committee suggests that the work of this committee be continued next year in order to obtain a more complete list of community nutritionists; to work out a more definite plan for publishing a bulletin; and to gather specific information regarding types of programs, materials being used, and organization procedures.—SOPHIA HALSTED, *Chairman, Department of Health, Detroit, Michigan.*

II. *Home Economics Training Schools and the Community Nutritionist.* The committee was organized for the purpose of studying home economics courses in which field experience in nutrition constitutes a part of the training, the findings to serve as a basis for recommendations to be made to the Professional Education Section.

The committee sought by means of a questionnaire:

1. To ascertain what schools or departments of home economics offered nutrition courses giving training in field work.
2. To determine the objectives of such courses.
3. To learn through what affiliation or affiliations the field training was conducted.
4. To obtain information concerning prerequisites, levels at which the courses were offered, and general content. Letters and questionnaires were sent to 75 heads of schools and departments of home economics.

Sixty-one replies were received in response to 75 questionnaires mailed. Of these, 23 reported field training in nutrition and 38, no field training. The sections of the country represented in the replies were as follows:

Section	Replies	Field Training
Eastern	14	7
Southern	17	6
Western	15	4
Midwestern	14	5
University of Hawaii	1	1

The field training varied greatly as to nature and extent. In some instances it was limited to observation only. It was frequently associated with general or child nutrition courses.

Among the objectives stated were the following:

1. To instill an appreciation of the practical application of nutrition knowledge.
2. To give an introduction to the nutrition problems encountered in health and welfare work.

3. To explain the need of nutrition work and teaching in public schools.
4. To give training in the presentation of scientific material to groups with varying educational background.
5. To give an understanding of the food problems that confront families of low income groups.
6. To help students to understand local situations and to develop a social sensitiveness to community problems.

Cooperating groups or agencies were as follows: welfare organizations, health departments and clinics, nutrition clinics, federal, state and local relief agencies, children's homes, public schools, visiting nurses' associations, Red Cross, A. I. C. P., and extension services.

In most instances the work was supervised by a member of the home economics staff or jointly by a member of the home economics staff and the agency. There were three reports of field training with agencies employing a home economics or nutrition director under whose supervision the student worked. In one case there appeared to be no direct supervision of the student.

Most replies indicated that the field experience was available for senior and graduate students. It was open to juniors in only a few instances.

More than one type of work was offered in most instances. The different items checked and the number in each case were as follows:

Nutrition work in public schools	15
Planning and interpreting diets of low income groups	13
Visits and consultations with families under care of a relief organization	13
Classes in nutrition and food preparation for groups of children	7
Nutrition service in a public health program	5
Work in a nutrition clinic	5
Other types of work	5

The study does not furnish enough specific information concerning the background of students in terms of courses prerequisite to the field course; the time given to actual field experience; the amount and method of supervision; and the correlation of field experience with the class work given in the home economics department.

A further study of the problem is recommended. This should include:

1. A coordination of the findings of this committee with those reported by Alberta Childs before the Public Health and Social Welfare Department of the American Home Economics Association.
2. A more detailed study of the prerequisites considered essential for home economics courses providing field experience.
3. A study of the extent of actual field experience (time considered necessary).
4. A more careful study of the qualifications of those responsible for the supervision, and the amount and kind of supervision given.
5 Cooperation between home economics department and agency through which field work is done.

—CECILIA SCHUCK, *Chairman, Purdue University, Lafayette, Indiana.*

III. *Minimum Qualifications for Home Economists and Nutritionists in Welfare Agencies.* This report, comprising the work of a joint committee of the A.H.E.A. and A.D.A., awaits the acceptance of both associations. Therefore it is being held for possible later publication.

IV. *Foreign Food Habits and Customs.* This committee has sought to compile a bibliography concerning many foreign nationalities with special emphasis on background, dietary habits, literature, cook books and recipes.

The form was revised this year, and each country is listed separately. This makes it possible to select the bibliographies of particular interest without purchasing the en-

tire set. A table of contents is to accompany each order so that one may be familiar with the material that is available.

The work of this committee is done by state and local associations in localities that have certain nationality groups and library facilities available for this type of study. This year the Ohio group revised the bibliographies on Czechoslovakia and Roumania, and the Wisconsin group completed the work on Japanese food habits. Mexican and Spanish bibliographies are being revised by the Texas group; Hungarian and Austrian by the New Jersey group; and Hawaiian by California.

The committee hopes to complete the work on "Jewish Food Habits and Customs" and the negro dietary early next year, and makes the recommendation that consideration be given the following revisions: India; Indian, East and West; Near Eastern (Armenian, Greek, Syrian and Turkish); Portugese; and Porto Rican.—DOROTHY B. HACKER, *Chairman, Visiting Nurse Association, 51 Warren Avenue, West, Detroit, Michigan.*

V. *Public Information on Nutrition.* The general purpose of this committee has been to disseminate authentic information on nutrition to the public at large and to assist state associations in their programs which embrace the following subcommittees:

A. *Commercial Publications*—Dr. Lillian B. Storms, chairman, reports:
   1. That her committee worked with the Wisconsin group on an exhibit for the 1938 meeting.
   2. That a questionnaire on the need for a bibliography brought a majority of negative responses.
   3. That more persons expressed a desire for exhibits of commercial publications than for card files (not usable to the membership) or bibliographies which are expensive and hard to keep up-to-date.
   4. That the committee recommends the continued collection and evaluation of commercial publications.

B. *Radio Subcommittee*—Mrs. Harry Neel, chairman, Rochester, Minnesota, reports a collection of radio scripts available for reference use; also a bibliography containing the names of books, articles and pamphlets of help to radio aspirants. It is hoped that a questionnaire can be developed which will elicit information from all state chairmen as to radio work being done in their territories. The chairman believes that the committee should continue to test and criticize programs for any member requesting such help and that this service be given greater publicity. She agrees with her predecessor that the proposed plan of radio recordings by the American Dietetic Association would be impractical because of expense.

C. *Food Fads and Fallacies Subcommittee*—Harriet T. Barto, chairman, University of Illinois. This committee began early in the fall of 1937 to interest the regional chairmen in the work begun by Jessie McQueen, viz: 1. Disseminating knowledge which will counteract food fads. 2. Preparing exhibits for local, state and national meetings. (To date of August 1, six of ten regional chairmen had reported as follows: Three states are planning nothing in the line of a food fads and fallacies exhibit. The remaining states are to be heard from.)

D. *Bulletins and Leaflets*—Marie Dye, chairman, Michigan State College, recommends that this committee be discontinued since its purpose was fulfilled by the collection of research material last year.

—ESSIE L. ELLIOTT, *Chairman, California Fruit Growers Exchange, Los Angeles, California.*

Diet Therapy Section

Chairman's Summary

This section had five definite projects for the year 1937–1938: (1) The Bibliography Committee abstracted articles of scientific interest. (2) The Food Clinic Committee developed a condensed outline for a graduate course for student dietitians, and a history of food clinics was started; graduate course for dietitians was studied; Food Clinics in America and other parts of the world were studied; a food clinic course in cooperation with the hospital student dietitian course was studied; and plans were made to have an article each month on food clinic work or related subject in the JOURNAL of the American Dietetic Association. (3) Elsie Martin studied the adequacy of the thousand calorie diet and her report, which will be published later, shows the wide variation in the protein, mineral and vitamin content of reduction diets. (4) As a result of the work carried on under the direction of Annette Mayer, we have a new allergy booklet with 47 recipes, all carefully tested. This booklet has been published and is now on sale. (5) The work on meat analysis as outlined last year, has been continued.

The compilation of analyses of commercial food products by the Massachusetts and New York Dietetic Associations has been completed and is ready for publication.—MARY A. FOLEY, *The Mayo Clinic, Rochester, Minnesota.*

Committee Reports

I. *Bibliography.* Diet therapy articles which appeared in the literature for the year 1937 were abstracted by members of the American Dietetic Association who volunteered to work on the committee. The abstracts were then compiled under subject headings into a bibliography which may now be purchased through the Business Office of the Association.—LEETA HOUSER, *Chairman, Menninger Clinic, Topeka, Kansas.*

II. *Food Clinic.* The following projects were carried on by the committee during the past year:

(1) A condensed outline for a Graduate Course for Student Dietitians was made.
(2) A history of Food Clinics was started.—Gertrude Spitz, sub-chairman.
(3) Graduate Course for Dietitians.—Martha Warne, sub-chairman.
(4) Food Clinics in America, Canada, and other parts of the world.—Mildred Levinson, sub-chairman.
(5) Food Clinic course in cooperation with the Hospital Student Dietitian courses.—Sarah Elkin Braun, chairman.
(6) An article each month on Food Clinic work or related subject in the JOURNAL of the American Dietetic Association.—Eloise Trescher, sub-chairman.

Graduate Course for Student Dietitians Training in Food Clinics

"The purpose of the Food Clinic is to aid in the dietetic treatment of the ambulatory patient by interpreting to the patient the doctor's food prescription in terms of the patient's special environmental situation; and to serve as a teaching center for students in the field of health and disease."

I. General organization of student course:
  A. A program covering one year
  B. Definite arrangements for:
    6 months in Food Clinic
    2 months in hospital dietetic service (for knowlege of special diet kitchen, ward teaching and understanding of the nature of administrative problems)
    1 month in social service department
    1 month in child guidance clinic
    1 month in family agency, public

health, relief, or other community organization
1 month in health education methods

C. Attendance at selected medical lectures, and others of affiliated organizations dealing with problems pertinent to the course. Food Clinic students will participate in courses arranged for student dietitians in hospitals.
D. Regular conferences with students and discussion of recent advances in nutrition.
E. Definite arrangements for visiting other hospitals, public health, educational and relief organizations.
F. Use of good library—medical, social, dietetic—for assigned readings.
G. Use of material offered by local, national, and commercial organizations.
H. Definite opportunity for assisting in the Food Clinic and carrying responsibility.

II. Details of organization of training course:
A. Organization of Food Clinic.
B. Principles of nutrition for the construction and computation of normal and therapeutic diets for children and adults.
C. Observation of routine methods of laboratory tests upon which diagnosis and treatment are based.
D. Teaching the patient—adult and child.
E. Food budgeting.
F. Opportunities for assisting in the teaching of various types of students and individuals in related fields.
G. Each student should work on some special problem in relation to the Food Clinic.

III. Entrance requirements for students in Food Clinics:
A. Minimum age of 21 years.
B. At least a bachelor's degree with college curriculum meeting the standards of preparation established by the American Dietetic Association.
C. Application for admission must be accompanied by:
1. Transcript of college credits
2. Record of physical fitness
3. Names and addresses of professional persons who are prepared to give necessary information as to character, ability and personality,—such list must include a professor under whom student majored in home economics.

(Preference will be given to those with the most thorough preparation in the social sciences.)—SARAH ELKIN BRAUN, *Chairman, Evanston, Ill.*

IV. *Revision of the Allergy Booklet.* The revision of the allergy recipes was for the purpose of making more standard and desirable products, and more uniformly constructed recipes.

Replies in response to questionnaires sent out to hospitals and several commercial concerns showed a great variation in the types of diets used and the need for many different recipes.

Many of the recipes had been tested by Gladys Mason, Cleveland, Ohio, who did this work as part of a graduate problem. The notations made in her report which was submitted to the committee were useful in selecting the recipes to be tested and rewritten. The form recommended by the American Home Economics Association was used in the construction of the recipes.

From the comments made by members who tested, revised, and reconstructed the recipes, we felt there was need for more work before the recipes are suitable for publication.—ANNETTE L. MAYER, *Chairman.*

Professional Education Section

Chairman's Summary

The six projects sponsored by this section during the past year are adequately reported by the respective sub-chairmen. Work on several of the projects will be continued during the coming year. It is most gratifying to report that the *Outlines of Courses in Nutrition for Nurses* has been published.

The responsibilities of this section regarding the approval of courses for student dietitians have been assumed by three approval committees as follows: Hospital Courses, Nelda Ross, Blanch Bohach, Lute Troutt; Administrative Courses, Bessie Brooks West, Katharine W. Harris, Cecelia McCarthy; Clinic Courses, Sophia Halsted, Dorothy Hacker, Mabel Perry.

Course outlines have been reviewed and comments and constructive criticisms offered. At the combined Approval Committee meeting in Milwaukee consideration was given to certain general policies as well as to possible improvements in inspection and approval procedure in order that recommendations concerning the same may be made to the Executive Committee.

A joint meeting of heads of home economics departments and directors of approved courses, instead of separate meetings, was planned in order to promote a better mutual understanding of the problems of each group. It is fitting that the American Dietetic Association, as a professional organization, should give attention to the better integration of undergraduate and graduate training of dietitians.—HELEN S. MITCHELL, *Massachusetts State College, Amherst.*

Committee Reports

I. *Outlines for Teaching Nurses.* When the chairmanship was accepted November 1, 1937, the conclusion was promptly reached that the outlines for teaching nutrition and diet therapy to nurses, included in the curriculum guide published by the National League of Nursing Education in 1937, should be the basis of the work of this committee for the following reasons: (1) the outlines were formulated under the chairmanship of a member of the American Dietetic Association assisted by other members who worked on the committee; (2) any outline can at best be only a guide and is subject to revision in order to meet varying conditions and standards set up in individual schools.

This plan met with the approval of the section chairman, Dr. Mitchell, the president, Lenna F. Cooper, and Isabel Stewart, chairman of the committee on revision of the curriculum guide. The Executive Committee on taking the plan under consideration, approved with the suggestion that committee members be selected who had had previous experience with the work on the A.D.A. outlines. Accordingly, Dr. Mary de Garmo Bryan, Dr. Helen J. Hubbell, and Henderika Rynbergen were asked to work with the chairman. Offers of assistance from other sources are gratefully acknowledged.

It was the purpose of the committee not to change the aim or the content of the league outlines. It was felt, however, that the topical form would be more usable than the narrative. Any change in wording, therefore, has been dictated by that decision.

Members of the committee have given generously of both time and thought and if the outlines prove to be helpful to our members it will be because of their faithful work.

Our committee suggests that a project for the section next year might be the planning of a nutrition laboratory and the listing of useful illustrative material in pamphlet form to be used as supplements to the outlines in teaching these courses.—GRACE CARDEN, *Chairman, Strong Memorial Hospital, Rochester, N. Y.*

II. *Study of the Teaching of Nutrition to Medical and Dental Students.* A project in-

itiating a study of the status of courses in nutrition and dietetics as taught in the medical and dental colleges of the United States was undertaken by a sub-committee of the Professional Education Section for 1937–1938. The results of a similar study were reported in 1932 by a committee of which Fairfax Proudfit was chairman.

The plan of the current study was similar to the one used by the 1932 committee. Questionnaires were prepared for distribution to all of the medical schools listed under the "Description of Medical Colleges" in the *Journal* of the A. M. A. for August 28, 1937, and the dental schools listed in "The Proceedings of the American Association of Dental Schools" for March 13, 1938. The questionnaires were grouped according to states and mailed to the state chairmen of the professional education sections. It was assumed that each chairman would be interested in the data for her own state, that she would be responsible for distributing the questionnaires to the proper persons, collecting them and returning them to the chairman of the general committee. In states where there were no such chairmen, the questionnaires were mailed to the deans of the schools.

An attempt to conduct the study through a committee with members in several localities proved unsuccessful with the result that the questionnaires were not mailed until August 1, 1938. Considering the cumbersome method used for distribution and the fact that many people in the teaching field are vacationing in August, the number of questionnaires received to date has shown a good response. There are 76 medical schools listed. Information was received from 46. Thirty-five of these schools stated that they give courses in nutrition and dietetics. Of the 39 dental schools, 21 returned questionnaires. Eighteen of them list courses in nutrition and dietetics. For obvious reasons, no attempt was made to tabulate the data.

Some general observations might be of interest. Few schools of medicine list courses in nutrition and dietetics as such. The work usually is given in connection with internal medicine, biochemistry, pediatrics and physiology. Fourteen dietitians are giving courses or assisting with the course in cooperation with another department, usually that of medicine. In very few cases are textbooks used. The organization of the courses indicates nothing approaching uniformity. The trend is to include the material pertaining to nutrition and dietetics in the last two years when most of the clinical teaching is done. However, many schools consider as sufficient the subject matter put forth in biochemistry and physiology. Among the dental schools, not more than 6 dietitians are listed as giving courses or assisting with them. The teaching is included in the study of physiology, biochemistry, children's dentistry, oral pathology and dental medicine.

Recommendations: (1) That a committee continue the study, completing the collection of data begun during the past year. (2) That a survey be made of the questions pertaining to nutrition and diet therapy asked in state and national board examinations for graduates in medicine and dentistry. (3) That the committee be composed of members residing in one locality.—FRANCES MACKINNON, *Chairman*, and ADELIA BEEUWKES, *University Hospital, Ann Arbor, Michigan.*

III. *Graduate Training for the Hospital Dietitian with a Review of the Course Content for Undergraduates.* Through the Professional Education Section of the A.D.A., a questionnaire was sent to the colleges offering training for the field of hospital dietetics. The graduate courses being offered were the particular interest of the committee, but as no study of undergraduate work had been made since 1933 it was decided also to review the undergraduate courses.

Fifteen of the 93 colleges reporting offer graduate training. Others stated their de-

sire to broaden their curriculum to make more graduate courses available. Several colleges have a plan of affiliation whereby it is possible to complete student dietitian training to meet the approval of the A.D.A. and to obtain a master's degree in approximately one and one-half years. Many colleges stated their interest in cooperating with such a plan of affiliation and offering more graduate training.

The review of the undergraduate courses was the second part of the study, and each person answering the questionnaire was also asked to express an opinion as to the adequacy of the courses offered. Forty-nine reported through follow-up on their students that the courses were adequate or excellent; 5 reported the courses were inadequate and 39 gave no opinion. Sixty-four of the colleges reported giving practical experience in institution management.

The suggestions which have been received on the questionnaires from the colleges and the more recent action of the Executive Committee of the A.D.A., indicate that there is mutual understanding of the further needs of the students. The report shows excellent progress in the last five years and with this splendid cooperation we should look forward to even greater results in the preparation of the dietitian in the graduate and undergraduate courses.

This report, although a project of the Professional Education Section of the A.D.A., was read in full at the American Home Economics Association meeting at Pittsburgh, June 29, 1938, because of the interest expressed in the replies to the questionnaires by the heads of home economics departments.—S. MARGARET GILLAM, *Chairman, New York Hospital.*

IV. *Objectives and Content of Non-Hospital Administrative Student Dietitian Courses.* The committee carrying on this project during 1936–37 under the able chairmanship of Rosalie Godfrey, submitted a very comprehensive preliminary report which has been the foundation for this year's work. The prior contributions of Anna Tracy and Mrs. Quindara Oliver Dodge were of great assistance in formulating the tentative outline.

The objective for this year has been to formulate an outline which would set forth the goals, procedures, and content for the non-hospital administrative courses. The chairman made the original draft which she submitted to her committee members for their criticisms and suggestions. A second outline was then constructed which incorporated, so far as possible, the suggestions of the committee. This revised form was then sent out for approval. The directors of the four non-hospital courses have participated as committee members in the development of the outline.

In order to augment the opinions of the committee, the tentative outline was submitted to some 25 or 30 members whose judgement would be extremely valuable in formulating the final outline. The outline as revised was submitted to the Executive Committee. After final approval it will be ready for use by the Business Office until such time as further revision seems necessary.—KATHARINE W. HARRIS, *New York State College of Home Economics at Cornell University, Ithaca, New York.*

V. *Academic Advancement for Dietitians Without Degrees.* The work of this committee was directed along two lines: extent and nature of requirements, under the direction of Emma Feeney; and types of courses available, under the direction of Margaret Ritchie. As a result of questionnaires mailed to state chairmen of professional education sections, presidents of local associations, individual dietitians and schools, a total of 31 replies were received, showing a wide range in the type of experience, and extent of education beyond high school. The extent of the experience of the dietitians without degrees likewise showed a wide range of from one to twenty-

Training of Student Dietitians, Approved by the Executive Committee, American Dietetic Association, Milwaukee, Wisconsin, October 8, 1938
Based upon report of courses given 1937-38

Hospital Courses

Course	Location	Dietitian in charge	Length of course—months	Number in course	Post-graduate credit	Total affiliation time—months	Registration and/or tuition fees	Additional expenses	Maintenance Provided: Room or cash allowance	Maintenance Provided: Board or cash allowance	Maintenance Provided: Professional laundry	Cash allowance to student per year
Canada												
University of Alberta	Edmonton, Alberta	Merran E. Drew	12	7	No	7 wks.	5.00	5.00	Yes	Yes	Yes	—
Vancouver General	Vancouver, B. C.	Ethel Pipes	12	10	No	4⅓	10.00	2.75	Yes	Yes	Yes	—
California												
Scripps Metabolic Clinic	La Jolla	Helen B. Anderson	12	6	No	8	5.00	80.00	Yes	Yes	Yes	—
Alameda County	Oakland	Natalie Van Cleve	12	8	No	5	—	30.00	Yes	Yes	Yes	70.00
University of California	Berkeley	Helen L. Gillum	12	8	10 unit minimum	4	55.00*	350.00	No	Yes	Yes	—
Colorado												
Colorado General	Denver	M. Pauline Dill	12	6	No	5	—	10.00	No	Yes	Yes	—
District of Columbia												
Freedmen's	Washington	Georgetta B. White	12	4	No	2	20.00	—	Yes	Yes	Yes	100.00
Walter Reed	Washington	Helen C. Burns	12	10	No	1	—	5.00	Yes	Yes	Yes	60.00
Illinois												
Cook County	Chicago	Millie Kalsem	12	12	No	2	10.00	(Carfare)	Yes	Yes	Yes	—
Mercy Hospital	Chicago	Mary McKittrick	12	4	No	2	10.00	(Carfare)	Yes	Yes	Yes	—
Michael Reese	Chicago	Margaret Cowden	12	20	No	—	—	—	Yes	Yes	Yes	—
University of Chicago Clinics	Chicago	Ella M. Eck	12	4	Yes	—	—	5.00	Yes	Yes	Yes	12.00
Indiana												
Indianapolis City‡	Indianapolis	Zelia Kester	12	6	No	2	—	10.00	Yes	Yes	Yes	—
Indiana University Medical Center	Indianapolis	Lute Troutt	12	14	Yes	1	50.00	—	Yes	Yes	Yes	—

Iowa												
University of Iowa	Iowa City	Kate Daum	12	10	Yes	—	85.00–100.00	—	Yes	Yes	Yes	—
Maryland												
Johns Hopkins	Baltimore	Phyllis Rowe	12	15	No	—	50.00	—	Yes	Yes	Yes	—
Massachusetts												
Beth Israel	Boston	Maniza Moore	12	9	No	2¾	5.00	(Carfare)	No	Yes	Yes	—
Massachusetts General	Boston	Marion D. Floyd	12	17	No	—	10.00	(Carfare)	No	Yes	Yes	—
Peter Bent Brigham	Boston	Gertrude McDonald	12	7	No	4½	5.00	(Carfare)	No	Yes	Yes	—
House of Mercy	Pittsfield	Blanche H. Smith	12	4	No	—	—	—	Yes	Yes	Yes	—
Michigan												
University of Michigan	Ann Arbor	Mable MacLachlan	12	16	Yes	1½	10.00	31.50	Yes	Yes	Yes	—
Harper	Detroit	Mary M. Harrington	12	10	No	2	10.00	(Carfare)	Yes	Yes	Yes	—
Henry Ford	Detroit	Helen Hawver	12	7	No	2½	10.00	5.00	Yes	Yes	Yes	—
Minnesota												
University of Minnesota	Minneapolis	Gertrude Thomas	12	12	No	5	—	—	Yes	Yes	Yes	—
St. Mary's	Rochester	Sister Mary Victor	12	13	No	3	25.00	(Carfare)	No	Yes	Yes	—
Ancker	St. Paul	Mrs. Winifred Erickson	12	5	No	3½	—	(Carfare)	Yes	Yes	Yes	100.00
Missouri												
Barnes	St. Louis	Louise Wilkonson	12	8	No	1¾	10.00	(Carfare)	Yes	Yes	Yes	—
St. Louis University	St. Louis	Mrs. Gladys H. Silkey	12	9	Yes	¼	5.00	—	Yes	Yes	Yes	—
Nebraska												
Lincoln General	Lincoln	Leta Linch	12	4	No	6	10.00	(Carfare)	No	Yes	Yes	—
New Jersey												
New Jersey Cooperative	Newark	Sophia Morris (Beth Israel Hosp.)	12	7	Yes	—	10.00	(Carfare)	Yes	Yes	Yes	—
New York												
Montefiore	New York City	Lenna F. Cooper	12	12	Optional	1¾	50.00†–150.00	5.00	Yes	Yes	Yes	—
Presbyterian	New York City	Nelda Ross	13	8	Yes	1½	50.00–150.00	5.00	Yes	Yes	Yes	—
Grasslands	Valhalla	Rhoda Tyler	12	8	Optional	1	5.00†	6.00	Yes	Yes	Yes	—

* For non-residents of California an additional tuition fee of $115.00 is charged.

† Fee required if student enrolls for graduate credit.

‡ Training discontinued during building program.

Training of Student Dietitians, Approved by Executive Committee, American Dietetic Association, Milwaukee, Wisconsin, October 8, 1938—Concluded

Course	Location	Dietitian in charge	Length of course—months	Number in course	Post-graduate credit	Total affiliation time—months	Registration and/or tuition fees	Additional expenses	Maintenance Provided			Cash allowance to student per year
									Room or cash allowance	Board or cash allowance	Professional laundry	
North Carolina												
Duke University	Durham	Mrs. Elsie W. Martin	12	6	No	—	10.00	—	Yes	Yes	Yes	—
Watts	Durham	Tiphaine Burgess	12	6	No	1½	10.00	—	Yes	Yes	Yes	—
Ohio												
Christ	Cincinnati	Wilma Robinson	12	6	No	3	10.00	10.00	Yes	Yes	Yes	—
Cincinnati General	Cincinnati	Marjorie Hall	12	12	No	4½	13.00	15.00	§	Yes	Yes	—
University Hospitals	Cleveland	Marie L. Hines	12	11	Yes	1	25.00	—	Yes	Yes	Yes	—
Starling-Loving	Columbus	Emma McCormick	12	4	Yes	1¾	—	—	Yes	Yes	Yes	—
Miami Valley	Dayton	Mrs. Alta B. Hirsch	12	10	No	—	—	—	Yes	Yes	Yes	—
Oklahoma												
University of Oklahoma	Oklahoma City	J. Marie Melgaard	12	8	No	1¾	10.00	3.00	No	Yes	Yes	—
Oregon												
Oregon State	Portland	Elizabeth Stewart (Good Samaritan Hospital)	12	4	Yes	—	10.00	118.50	Yes	Yes	Yes	—
Pennsylvania												
Jewish	Philadelphia	Helen E. Paynter	12	4	No	1½	10.00	6.00	Yes	Yes	Yes	—
Pennsylvania	Philadelphia	Helen E. Gilson	12	12	Yes	1	50.00	(Carfare)	Yes	Yes	Yes	—
Philadelphia General	Philadelphia	Elizabeth Miller	12	4	No	1½	10.00	—	Yes	Yes	Yes	—
Shadyside	Pittsburgh	Irene L. Willson	12	3	No	3	—	25.00	Yes	Yes	Yes	—
Western Pennsylvania	Pittsburgh	Charlotte Addison	12	6	No	2½	—	(Carfare)	Yes	Yes	Yes	—
Tennessee												
Vanderbilt University	Nashville	Salome Winckler	12	6	No	1½	10.00	30.00	Yes	Yes	Yes	—
Utah												
Dr. Groves' Latter Day Saints	Salt Lake City	Katharine Bielby	12	9	No	4½	10.00	10.00	Yes	Yes	Yes	—

Saints												

Virginia												
Medical College of Virginia	Richmond	Aileen Brown	12	7	Yes	—	—	—	Yes	Yes	Yes	—
Washington												
Seattle Course for Student Dietitians	Seattle	Ruth Forsberg (Swedish Hospital)	12	10	No	—	25.00	65.00	Yes	Yes	Yes	—
Administrative Courses												
Florida												
Florida State College for Women	Tallahassee	Anna M. Tracy	10	4	Optional	—	12.00†	—	Yes	Yes	Yes	50.00
Massachusetts												
Women's Educational and Industrial Union	Boston	Mrs. Quindara Oliver Dodge	12	8	Yes	6 wks.	15.00	30.00	No	Yes	Yes	—
Texas												
University of Texas												
Student Administration	Austin	Rosalie S. Godfrey	9–12		Optional	—	†	—	Yes	Yes	No	—
Advanced Administration	Austin	Rosalie S. Godfrey		5	Optional	—	†	—	No	Yes	No	360.00–550.00
Washington												
University of Washington	Seattle	Margaret Terrell	12	10	Yes	3	15.00	—	Yes	Yes	Yes	120.00
Food Clinic Courses												
Massachusetts												
Boston Dispensary	Boston	Frances Stern	12	3	No	2	—	—	No	No	Yes	—

§ Room is provided for six students; the other six pay for outside room.

† Fee required if student enrolls for graduate credit.

nine years. It is believed that a further attempt should be made to reach this group and that the questionnaires should be modified and mailed early in the fall.—EMMA L. FEENEY, *Pratt Institute, Brooklyn.*

VI. *Visual Education, Films of Dietary Department Activities.* The following two motion pictures were completed in advance of the Milwaukee meeting: (1) "Nutrition as a Part of the Health Program in a Children's Hospital," (an 8 mm. film requiring about 40 min. to run) Mrs. Eva Ylvisaker, Children's Hospital, Cincinnati. (2) "The Nutrition Program at the Children's Convalescent Home," (a 16 mm. film requiring about 50 min. to run) Catherine Koch, Cincinnati.

Sister Romuald of the Good Samaritan Hospital, Cincinnati, planned to make a motion picture this year, but was too busy with her hospital reorganization work. Mrs. Alta Hirsch of the Miami Valley Hospital, Dayton, Ohio, could not complete her plans in time to have a film ready for the convention. Georgetta White of Freedmen's Hospital, Washington, D. C., found it too expensive, but has not given up the idea.

I believe there is great interest in motion pictures as a teaching medium. Dietitians all over the country have used my films and were very enthusiastic, but many do not have the facilities or the time to make a film.

If the project is to be continued another year I would suggest that a new form showing the cost, time required, and suggestions for taking motion pictures be sent out to the members.—CATHERINE KOCH, *The Children's Convalescent Home of the Cincinnati Orphan Asylum, Auburn Ave. and Wellington Place, Cincinnati, Ohio.*

Committees

Educational Exhibits

Your committee has been ever mindful of one main theme: the creating of an intelligent understanding of (1) the purpose and value of the American Dietetic Association; and (2) the rôle of the members of the Association, that is the dietitian, the community nutritionist and others, in the field of nutrition education. With this aim in view, the committee has endeavoured to present educational exhibits at (1) a number of allied national organization meetings, and (2) all state dietetic association and medical meetings when requested.

In the course of such a program it became evident that the budget would not permit a national representative to be present at such meetings and be responsible for the exhibit. Thus it was necessary to formulate a tentative policy which would permit securing the cooperation and assistance of state and local dietetic associations.

It is gratifying to report that in every instance where the request was made, the state associations have accepted their responsibility for representing the national organization and have done a most creditable job.

During the course of the year the American Dietetic Association has had an exhibit at each of the following:

National Organization Meetings

American Association for the Advancement of Science, Indianapolis, Dec. 27–30, 1937

Association for School Health and Physical Education, Atlanta, April 20–23, 1938

American Nurses' Association, Kansas City, April 25–29, 1938

American Psychiatric Association, San Francisco, June 6–10, 1938

Catholic Hospital Association, Buffalo, N. Y., June 13–17, 1938

American Home Economics Association, Pittsburgh, June 28–July 1, 1938

American Hospital Association, Dallas, Sept. 26–30, 1938

American Dental Association, St. Louis, Oct. 24–28, 1938

State and Local Organizations

Chicago Dental Society, Chicago, Feb. 14–18, 1938

Mid-West Association of School Health and Physical Education, Chicago, April 6–9, 1938

Tri-State Hospital Association, Chicago, May 4–6, 1938

Kansas State Medical Society, Wichita, May 7–16, 1938

Illinois State Medical Society, Springfield, May 16–21, 1938

Florida State Medical Society, Daytona Beach, June 27–30, 1938

An exhibit tells a story, but your committee felt the need of something still more permanent, something which might be placed in the hands of each person visiting the booth. With the cooperation of the Executive Committee, a leaflet was prepared for distribution. This four-page leaflet discussed briefly the Association's work and its organization, and included a guide entitled "The Foods for Health." Sixty-two hundred leaflets have been distributed to date, and from the interest manifested many more could be distributed if there were more publicity on the availability of such material.

The next responsibility of the committee was the development of a permanent display which would present the training and work of the dietitian. Members of the association are interested in a number of fields of activity. It was thought wise to select a major activity, the training and work of the hospital dietitian, for the first presentation. On this we have received the invaluable help of many prominent hospital dietitians.

Since many groups are interested in the contribution of the community nutritionist to the nutrition field, plans are being made for this as the second panel.

The finished exhibit consists of a background of three panels, two devoted to the training and work of the dietitian, with the center a replica of the Association's JOURNAL. Panels one and three are built so that they may be changed to suit the needs. The exhibit was on display for the first time at the Milwaukee meeting, and includes complete furnishings, all owned by the Association. This exhibit will be used for all national meetings during the coming year.

The committee has also secured exhibits from the four sections of the Association and from state associations who wished to have a display at the Milwaukee meeting. It is hoped that another year will see an exhibit from each state association as well as one from each of the national sections.

Several federal organizations were represented at Milwaukee, including the Bureau of Home Economics and the Children's Bureau. The Department of Public Health and Social Welfare of the American Home Economics Association prepared an exhibit of publications for the use of workers in the field of public health and welfare.

Arnold Shircliffe consented to display part of his collection of menus at the Annual Meeting.

The following recommendations are made: (1) that each state association be urged to assume responsibility for exhibits at allied national meetings; that the placing of all exhibits be initiated by the chairman of the Educational Exhibits Committee; and that the national organization assume financial responsibility for the major portion of the exhibit, the state being asked to staff the exhibit with members who can represent the national. (2) That the national section chairmen act as members of the Educational Exhibits Committee and give assistance in the planning of all national and state meetings.

The chairman of the committee believes that the work of the committee has reached such proportions that activities could be carried on more efficiently and to better advantage if the responsibility were placed on someone in the headquarters office, the chairman acting only in an advisory capacity. She recommends that the Executive Committee plan toward that end.

The committee wishes to thank all who have helped in the work during the year. The members of the Executive Committee have been very helpful, the members of state associations have also contributed much, and the staff of the Business Office have been ever faithful in handling details.—MARIETTA EICHELBERGER, *Chairman;* ALBERTA CHILDS, MARGARET C. HESSLER BROOKS, and SARAH ELKIN BRAUN.

History

A narrative report, by the former chairman, of the work covered during the Twentieth Annual Meeting was typed on heavy paper and placed in a new volume. Following this summary, material of interest from the Richmond meeting was clipped and added to the History Book. Copies of the A.D.A. *Star*, A.D.A. *Lines*, all local publicity, menus used and southern recipes compiled by Blanche Tansil are included.

The first meeting of the House of Delegates was fully covered. The list of members attending the assembly and copies of all the speeches greeting the first members of the House of Delegates were included.

Photographs of 19th and 20th century kitchens have been added to the history. These are photographic copies of the model kitchens given to the Rosenwald Museum by the American Dietetic Association.

Accounts of the 1933 and 1934 meetings were added to the summary book. The latter is sent out to members who inquire about the growth of the Association.

The material from the local and state associations was not included in this past year's records, due to the decision that this is not a responsibility of the national Association.

A letter to all members from the President, Miss Cooper, including the aims and projects of all committee chairmen for 1937–38, was added to the history.

The chairman would like to make the following recommendation: Because of the lessened load due to omission of local and state association histories, the historian of the national Association could compile the reports and data assembled by the various section chairmen, allowing one volume for each section. This material is briefed in the Annual Reports, but copies of the questionnaires submitted to the members as well as the complete results of the surveys are of interest both to succeeding section chairmen and their committee members.—ELSIE W. MARTIN, *Box 3713, Duke University, Durham, North Carolina.*

Legislative

The Women's Joint Congressional Committee is composed of eighteen member organizations, including the American Dietetic Association. This committee has as its purpose the advancement of legislation that may be of aid to women, the family or the home. Meetings are held each month while Congress is in session and at other times at the call of the chairman. It has been customary each year to have a dinner for the women in Congress. At this time the aims and the accomplishments of the committee are explained.

Each member organization decides upon the legislation of interest to its particular group and the representatives of each organization work toward effecting such legislation. For the last few years the work of the Women's Joint Congressional Committee has been concerned chiefly with the passage of the food and drug act. It is not necessary in this report to go into the details of this legislation since it has been publicized so thoroughly. The representatives of the American Dietetic Association have attended the meetings and served on the committee for the passage of the food and drug act. Many of these meetings have been called on short notice which makes it imperative that an Association representative be near at hand.

Your representative recommends that the American Dietetic Association continue to support its present program and that the

Executive Committee approve or disapprove any suggestions to be made by the representative during the time that Congress is in session.—MARIE MOUNT.

Library

The Business Office has the following report to offer concerning requests made for the lending library of the American Dietetic Association from September 1937 through September 1938:

Number of requests for library material	64
Number of requests received for following types of material:	
Administrative	5
Case histories	2
Children's hospital material	2
Codes of ethics	2
Dental material	2
Diabetic	7
Diet manuals	7
Food clinic	6
Floor plans	5
Menus	2
Organization charts	2
Outlines for medical students	5
Outlines for student dietitians	5
Outlines for student nurses	10
Nursing material	3
Public health material	2
Student rating sheets	2
Miscellaneous material:	
Suggestions for preparing food fads exhibit	4
Foreign foods material	1
Sample radio talks	3
Vocational material	3

Letters were sent to each president of state dietetic associations. All contributors from each state were listed. We asked for names of any other institutions or hospitals from which we might solicit library material. In response to the above letters we have received a list of 15 new institutions and hospitals and have requested material from the dietary departments of each.

It was found that 15 hospitals and institutions offering approved course training were not represented in the library. We therefore sent them a special letter asking for material.

A letter wherein their material was listed was sent to all library contributors. We asked if they wished to check or revise their library contributions in advance of the Milwaukee meeting. In this letter a special request was made for dietary department forms, precedent or organization books, and patient instruction manuals.

A new library bibliography which should be helpful to each member has been prepared and was placed on display at the Milwaukee meeting.

The response from the various letters was exceptionally good. The material came to us in excellent condition. Since our library is representative of our whole organization, each member's contribution has its place. May I thank all contributors for their assistance and Miss Lenfest and her staff for their help in compiling and organizing the lending library which is available for your use.—BERNICE SWARTZ SCHIPPMANN.

Organization and Procedure Book

In accordance with the recommendations made last year, the procedure book is being developed as follows: (1) Interpretation of the constitutional duties of each officer, all boards, appointive and standing committees. (2) General aims and objectives to be developed by the various officers, sections and committees are stated. (3) Procedures found valuable in meeting the responsibilities of each office are listed.

The tentative outline for each office, board, and committee had been sent to the officer acting in that particular capacity with a request for modifications and recommendations. Many reports have been received which will simplify procedures and prevent duplication of effort. These recommendations will be included in the present manual and a copy of the duties, aims, and procedures pertaining to the office will be sent to each incoming officer, immediately following the annual meeting.

Anna M. Tracy developed a very fine organization chart for the Association which has been included in the manual. A copy of this chart will also be sent to each incoming officer to acquaint her with the general organization of the American Dietetic Association so that the activities of all offices may be outlined and guided in a uniform manner.

Organization policies may not vary greatly from year to year, but procedures and techniques used to interpret these policies do change, and the Procedure Book should be carefully analyzed and revised each year if it is to be valuable to the Association.

The Procedure Book has not been completed. It must be carefully checked with the revisions, must include the many recommendations which have been received and must be so edited as to follow the form used in our Association JOURNAL and other reports.—MARY M. HARRINGTON.

Publicity

The 1937 Annual Meeting in Richmond brought much local publicity as the sessions were well covered by the two local papers. Many personal interviews and photographs were used for feature articles. As there was only one press association office in Richmond, fewer stories than usual were carried by newspapers throughout the country. Articles, however, appeared in the newspapers of 211 cities in 37 states. As several articles were carried by some publications and there are, in some cities, more than one paper, the total number of clippings was 396. This betters the Cleveland record, but is not so large as that of Boston.

During the year, three letters were sent to state and local publicity chairmen. Suggestions for handling local publicity were sent to new chairmen. This question was also discussed at the annual publicity luncheon, which was particularly well attended in Richmond.

The publicity plans for the Milwaukee meeting were initiated when a day was spent with the Milwaukee group in February. Since then the matter has been handled by correspondence.—EDITH M. BARBER, *Chairman, 36 West 9th Street, New York City.*

What Colleges Supply Student Dietitians for Training Courses Approved by the A. D. A.

At the request of the American Dietetic Association a joint committee of this Association and the American Home Economics Association for five years has been studying the possibility of listing the colleges and universities which send well-qualified candidates to take the student hospital, administrative, and clinic courses approved by the A. D. A. It was at first thought that it might be possible to make visits of inspection, but correspondence and conference with those engaged in various standardizing projects made it clear that it would be unwise to attempt this without making substantial financial provision for the study. Since neither association has such funds this plan was shelved for the present.

It seemed to the committee, however, that it would be worth while to learn what colleges and universities habitually send reasonably large numbers of satisfactory students to the approved courses. Lists covering both 1933 and 1934 were provided by the dietitians and later separate lists for students completing their hospital or other approved courses in 1935, 1936, and in 1937. The committee is very grateful to the dietitians for making complete returns and to the home economics executives of the colleges who verified and corrected the lists for 1936 and 1937. In preparing the lists which follow, the figures for 1933 and 1934 were disregarded because they are less complete and less reliable than the figures for the three later years when the questionnaire was in better form. Students from foreign countries are omitted.

Of the students who completed their hospital or administrative training in 1935, 1936, or 1937, about two-thirds came from

a group of 27 colleges and universities. The average number per year from this group ranged from 4 to 28.

Colleges and Universities Represented in the Approved Hospital and Administrative Course by Four or More Students (Average) 1935, 1936, 1937

Battle Creek College
Cornell University
Florida State College for Women
Iowa State College
Kansas State College
Michigan State College
North Dakota Agricultural College
Ohio State University
Pennsylvania State College
Purdue University
Seton Hill College
Simmons College
State College of Washington
State Teachers College at Framingham
State University of Iowa
State University of Montana
Teachers College, Columbia University
University of California
University of Cincinnati
University of Illinois
University of Minnesota
University of Nebraska
University of North Dakota
University of Washington
University of Wisconsin
Western Reserve University
Woman's College, University of North Carolina

About one-sixth of the students during these three years came from a group of 28 colleges, each of which averaged 2 or more but less than 4 students per year in 1935, 1936, and 1937. Although these numbers are small it appears that the colleges in this group have a steady vocational purpose and habit.

Colleges and Universities Represented in the Approved Hospital and Administrative Courses by Two to Less than Four Students (Average) in 1935, 1936, 1937

Butler University
Colorado Agricultural College
College of Saint Catherine
College of Saint Theresa
Fontbonne College, St. Louis University
Georgia State College for Women
Indiana University
Madison College, Harrisonburg, Virginia
Massachusetts State College
Milwaukee-Downer College
Mount Mary College, Wisconsin
New Jersey College for Women
New York University
Ohio Wesleyan University
Oklahoma Agricultural and Mechanical Institute
Oregon State College
San José State Normal College
Syracuse University
Texas State College for Women
University of Alabama
University of Arizona
University of Chicago
University of Colorado
University of Idaho
University of Maryland
University of New Hampshire
University of Tennessee
University of Utah

The remaining sixth of the students came from a long list of institutions—38 in 1935, 45 in 1936, and 44 in 1937. How "occasional" these appointments are, is shown by the fact that only 4 of these colleges had students in the hospitals in each of the three years and the total number of colleges, if the three years are taken together, is 88. These colleges are all of sufficiently good general standing to be listed in *Accredited Higher Institutions*, Bulletin 16, 1934, Office of Education, a revised 1938 edition of which will soon be available.

What should be the attitude of the dietitian toward admissions from the colleges of good general standing which have only occasional candidates? The only answer the committee can give is that dietitians disagree markedly. Some dietitians, in the 5 years studied, have limited their student admissions to a few of the colleges of well-known reputation in this field. Other dietitians (and the group includes some of

the most experienced dietitians in the Association) believe that some of their very best students have come from the smaller colleges. The committee cordially approves such experimentation when the student is outstanding in personal qualities, and meets all the course requirements listed by the American Dietetic Association; but we suggest that the hospital dietitians scrutinize records and catalogues carefully and that the colleges in this group be extremely careful to recommend only students of outstanding professional promise.

That our hospital dietitians still need to be on their guard not to admit students from poorly qualified institutions is indicated by the fact that 3 students who completed their hospital training in 1937 came from colleges not on the lists of Bulletin 16. The committee earnestly recommends that dietitians consult this bulletin and withhold appointments from students coming from institutions whose general standing is not sufficiently good to be approved.—ALICE F. BLOOD, *Chairman*, MARIE DYE, BESSIE BROOKS WEST (representing A.H.-E.A.); MARY DE GARMO BRYAN, MARTHA KOEHNE, *and the Chairman of the Professional Education Section, ex-officio* (representing A.D.A.).

Executive Committee[1]

Hotel Schroeder, Milwaukee, Wisconsin, October 8–10, 1938

Members present: Lenna F. Cooper, Anna M. Tracy, Beula Becker Marble, Ruth M. Kahn, Sarah Elkin Braun, Adeline Wood, Helen Walsh, Mary Foley, Helen Mitchell, Mary Pascoe Huddleson, Edith Barber and Dorothy Lenfest.

The Saturday morning session was called to order by the president at 11:00 A.M. Reports were presented by the president, president-elect, secretary and treasurer, and were accepted. A recommended statement of policy for officers and representatives attending national and state meetings was presented and accepted.

The afternoon session was called to order at 2:00 P.M. with the same members present. Brief reports were given by the chairmen of Administration, Community Education, Diet Therapy and Professional Education Sections. The question of publishing the "Large Quantity Recipes" collected by the Administration Section this year was considered and it was moved, seconded and carried that a committee be appointed to consider various publishing houses relative to publishing the recipes. The report on the "Minimum Qualifications for Home Economists and Nutritionists in Welfare Agencies" was accepted with a few recommended changes.

The evening session was called to order at 6:00 P.M. Dorothy Lenfest presented her report as business manager and it was accepted.

The report of the editor was presented and accepted. In giving her report, the editor brought up the question of exchange subscriptions with other publications, a student column in the JOURNAL, and the need for a detailed reference sheet for guidance in the matter of terminology. It was moved, seconded and carried that the matter of exchange subscriptions be left to the discretion of the editor, president and business manager and that their decision be made in the light of the established practice of reputable publications. The committee felt the need for a guidance sheet with reference to terminology and decided to refer the matter to the Journal Board for their recommendations. It was moved, seconded and carried that it be recommended to the Journal Board that it is not particularly desirable to include a student column in the JOURNAL at the present time.

[1] Condensed reports of the sessions of the Executive Committee, the House of Delegates and the Business Meeting, appear in this JOURNAL. The complete notes of these meetings are on file in the Business Office of the Association.

The editor gave a brief report of a conference with members of the staff of the Council on Foods of the American Medical Association.

The secretary presented several membership applications on which special action was taken. The requirements for associate membership were discussed and a committee appointed to study the requirements and report their findings to the Executive Committee.

Edith Barber gave a report of her work as publicity chairman which was accepted.

The question of admitting foreign trained students to approved courses was discussed. It was moved, seconded and carried that the American Dietetic Association reiterate its policy with regard to specified academic training required for admission to approved courses. This applies to foreign students as well as United States students and whenever possible advice as to the academic qualifications of a foreign student should be obtained from a qualified American Dietetic Association member located in the country from which the student comes.

The report of the Joint Committee on School Cafeterias of the American Home Economics Association and the American Dietetic Association was read and approved.

The meeting adjourned at 12:15 A.M.

October 9, 1938. The evening meeting was called to order at 7:00 P.M. Helen Mitchell presented the recommendations of the Approval Committee which were accepted. It was moved, seconded and carried that approval be continued in the non-inspection year on the basis of a report submitted by the director of the approved course listing changes and any other pertinent information. It was also moved, seconded and carried that the American Dietetic Association give temporary approval to the University of Washington five-year plan concerning a student training course.

Dr. Alice Blood presented her report of the study made by the joint committee of the American Home Economics Association and the American Dietetic Association. It was moved, seconded, and carried that this report with its recommendation for continuance be approved for publication in the JOURNAL.

Helen Walsh read the report of Anna de-Planter Bowes covering the Conference for Better Care of Mothers and Infants. The Executive Committee accepted the report with its recommendations, including the $10.00 contribution.

The reports of the chairman of the Procedure Book and of the historian were read and accepted.

The treasurer gave a brief report of the Finance Committee meeting held just prior to the Annual Meeting. The proposed budget as set up by the Finance Committee was presented to the Executive Committee and accepted.

It was moved, seconded and carried that the secretary be instructed to present a request to the chairman of the House of Delegates to the effect that she present to the House of Delegates the matter of the fifty cent refund made to affiliated state associations for membership dues paid before March 1; that she present the matter of additional copies of the JOURNAL made available to members at no added cost; and that if the House of Delegates, after discussing the matter, see their way clear to recommend to the Executive Committee that the fifty cent allowance be discontinued, it would be of great financial benefit to the Association as a whole.

It was moved, seconded and carried that a committee be appointed to study the activities of the Association as they affect the Business Office and as they affect the possibilities for the future development of the Association; that this committee be asked to report to the August 1939 meeting of the Executive Committee; and that at least one member of the committee be a member of the Finance Committee.

Helen Mitchell presented the listing of approved courses recommended by the Approval Committee. The Executive Committee approved the listing for publication.

The secretary presented the report of the committee studying associate membership requirements. It was moved, seconded and carried that the secretary present the report to the chairman of the House of Delegates, asking the House of Delegates to consider the question of requiring a bachelor's degree for associate membership and in considering it to think of the question in terms of their own state membership.

The meeting adjourned at 12:15 A.M.

October 10, 1938. The evening meeting was called to order at 9:30 P.M.

The reports of the Investigation Committee and of the Committee on Awards and Scholarships were read and accepted.

Helen Mitchell presented the outline of content and objectives of the administrative course for student dietitians as prepared by the Professional Education Section. It was accepted with a few minor changes in wording proposed to avoid confusion or wrong interpretation.

The report of the Journal Board was read and the recommendations accepted.

In the absence of the chairman of the Placement Bureau Board, Selma Streit gave a summarized report of the Placement Bureau Board which was accepted.

Anna Tracy read the list of invitations received by the American Dietetic Association for its 1940 Annual Meeting. Dorothy Lenfest outlined the necessary facilities to meet the requirements of the meeting as the policy now stands. Miss Lenfest was requested to present the same type of report before the House of Delegates.

The president closed the meeting giving her thanks to the members of the Executive Committee for their hearty cooperation throughout the year.

The meeting adjourned at 11:30 P.M.

Business Meeting

The business meeting of the 21st Annual Meeting of the American Dietetic Association was called to order at 3:30 P.M. on Monday, October 10, 1938, by the president, Lenna F. Cooper.

Upon motion by Dr. Alice Blood, duly seconded and carried, the reading of the minutes of the previous meeting was dispensed with.

The vice-president, Beula Becker Marble, was then asked to take the chair during the reading of the president's report. This was followed by the report of the vice-president, Mrs. Marble.

The report of the president-elect, Anna M. Tracy, was read, which also included the report of the affiliation chairman.

Ruth Kahn, as secretary and chairman of the Membership Committee, presented her report.

Upon motion duly made, seconded and carried, the reports of the section chairmen were not read due to the lack of time and because these reports are published in detail in the JOURNAL.

The publicity chairman, Edith M. Barber, read her annual report.

The report of the Nominating Committee was read by Laura Comstock, chairman, who then read the list of proxies.

Jennie Tilt, chairman of the Revisions Committee, read the proposed amendments to the constitution. Each revision was considered separately, and upon motion duly made seconded and carried each revision was adopted.

The editor of the JOURNAL, Mary Pascoe Huddleson, read her annual report.

Upon motion made by Sarah Elkin Braun, duly seconded and carried, the following reports were not read, with the understanding that they be published in full in the JOURNAL: Placement Bureau Board, Journal Board, Historian, Investigation Board, Librarian, Educational Exhibits, Organization Book, Joint Committee on Conference of Food

Service Directors, Legislative Committee, Program Chairman, and Local Arrangements Committee.

The treasurer's report was presented by Sarah Elkin Braun, treasurer.

Upon motion made by Virginia Ray, seconded by Emma Feeney, and carried, the reports read before this meeting were accepted as read.

Upon motion duly made, seconded and carried, this meeting adjourned at 4:30 P.M.

Officers elected for the year 1938–1939 were as follows: president-elect, Beula Becker Marble, Huntington Memorial Hospital, Boston; vice-president, Margaret Edwards, Woman's College, University of North Carolina, Greensboro; secretary, Angeline Phillips, University Hospital, Omaha. Members of the Nominating Committee were elected as follows: Lute Troutt, Indiana University Medical Center, Indianapolis, chairman; Marie Hines, University Hospitals of Cleveland; Ruth Bowden, Sansum Clinic, Santa Barbara, California; Jennie Tilt, Florida State College for Women, Tallahassee; and Virginia Howard Ray, Albany Hospital, Albany, New York.

House of Delegates

October 10, 1938, 9 A.M.: Reports of the following committees were read: Committee on Inspection of Student Courses, Committee on Working Plans for the House of Delegates of the American Dietetic Association, and Committee on Membership Requirements.

Upon motion duly made, seconded and carried, discussion of these reports was held over until the adjourned meeting.

New business: The matter of the fifty-cent refund to state memberships; the matter of requiring a bachelor degree for associate membership; and the list of cities inviting the 1940 meeting, were read and discussed.

October 10, 1938, 9.30 P.M.: Motion made by Mrs. Newsom, seconded by Dr. Tilt, that the report of the Committee on Inspection of Student Courses be referred to Executive Board. Motion carried.

Discussion on Report of Committee on Working Plans for the House of Delegates of A.D.A.:

Section 1. Motion made, seconded and carried that the members of the House of Delegates be required to have been active members of the A.D.A. for three years.

Section 2. Motion made, seconded and carried that the term of office for members of House of Delegates be two years and that it be at the discretion of the states as to whether the incumbent shall be returned for a longer period of time.

Section 3. Motion made, seconded and carried that this section be accepted as read.

Section 4. Motion made, seconded and carried that this entire section be laid on the table for consideration at the 1939 meeting. (This automatically tabled Section 5.)

Section 6. Motion made, seconded and carried that this section be adopted as read.

Section 7. Motion made, seconded and carried that this section be adopted as read.

Section 8. Motion made, seconded and carried that the chairman of the House of Delegates be a member of the Executive Board. (This automatically tabled Section 9.)

October 12, 1938, 4 P.M.: Motion made, seconded and carried that the House of Delegates in the future hold its first meeting on the Sunday afternoon previous to the opening of the regular sessions of the Annual Meeting.

Motion made, seconded and carried that a bachelor's degree be required for membership of any sort in the American Dietetic Association.

Motion made, seconded and carried that the matter of refunds to states be postponed; that it be held over as old business to be taken up at the next meeting of the House of Delegates, and that the states who do not desire membership refunds so notify the

Business Office. Motion then made, seconded and carried that the states asking for these refunds be published from time to time in the JOURNAL.

Motion made, seconded and carried that further discussion concerning the question of an executive secretary for the American Dietetic Association be continued at a later meeting.

Motion made, seconded and carried that it be recommended to the Executive Board that the machinery of nominations be continued as it was this year; namely, that there be a double slate for all officers except the president-elect. Report of tellers on meeting place for 1940: first choice, New York City; second choice, Detroit; third choice, Philadelphia.

Resolutions

At the close of the 21st Annual Meeting of the American Dietetic Association, we take this occasion to express to our hostesses, the Milwaukee Dietetic Association, our appreciation for the time and effort which have made possible this successful meeting.

While we realize that many people have contributed generously and effectively in providing for a profitable and interesting meeting, we can acknowledge only a few contributions.

It seems fitting that one of the charter members of the Association, Lenna F. Cooper, presided as president at this 21st meeting, for she has seen the membership grow from 58 to 3800 at the present time.

To Margaret C. Hessler Brookes, program chairman, and to her committee, we express our appreciation for the inspiring character of the program. Each speaker has brought us encouragement in furthering our professional activities. We regret that illness prevented Mr. William Benton from speaking to us.

To the members of the Wisconsin and Milwaukee Dietetic Associations, who have wholeheartedly assisted Nell Clausen, chairman of local arrangements, we offer our sincere thanks.

We gratefully acknowledge our indebtedness to the following chairmen and their committees for all they have done to make this a successful and pleasurable meeting: Mrs. Ethel Keating, hospitality; Mrs. Breta Luther Griem, publicity; Theresa Goetz, tickets; Ada Lothe, program; Katherine Lambert, trips; Katherine Lees, pages and ushers; and Doris Johnson, local exhibits.

We extend our thanks to those who gave gracious support to the committees and for the hospitality offered us by the following: the faculties of Milwaukee-Downer College, Mount Mary College and Milwaukee Vocational School; the staff of the Milwaukee County Institutions; the Board of Directors of the Children's Convalescent Home; the Milwaukee Association of Commerce; the Wisconsin State Conservation Department and the State Department of Markets; the newspapers of Milwaukee; and the Schroeder Hotel.

The pleasurable trips to Madison, Wisconsin, and Rochester, Minnesota, through the efforts of Lillian O. Fried and Mary A. Foley, bring to a happy conclusion a memorable week. We especially thank President and Mrs. Dykstra, Miss Abby Marlatt and her staff and others at the University of Wisconsin who have contributed to our pleasure. We appreciate the courtesies extended at Rochester by The Mayo Clinic and the Kahler Corporation and the program which they have provided.

We acknowledge the contributions of Dr. Marietta Eichelberger who arranged the very interesting educational exhibits, and Mr. Arnold Shircliffe who brought to us his valuable collection of historical menus.

We realize that the exhibitors have contributed in many ways to the interest and pleasure of the meeting. To Dorothy Lenfest, business manager, and to her staff, we again tender our sincere appreciation for a

job well done. We also appreciate the excellent work of the publicity chairman, Edith Barber, and her capable assistants.

The retiring president, Lenna F. Cooper, and the members of the Executive Committee have untiringly given their wise counsel in guiding the Association through a successful year. To the incoming president and her Executive Committee we pledge our loyal and enthusiastic support for the continuation of the activities and extension of the work of the Association.

We recommend that these acknowledgements be adopted by the Association as resolutions.—LILLIAN B. STORMS, *Chairman* MABLE MACLACHLAN, and MILLIE KALSEM

EDITORIAL

The Milwaukee Meeting in Retrospect

When one attempts a descriptive account, a word picture, of the Association's annual meetings in recent years, one finds the available supply of adjectives inadequate, and wishes that a fresh crop of these might sprout each year, to be harvested in October. We are thus inclined to envy the facility with which the Hollywood master-minds coin such phrases as "super-colossal", with which they hope adequately to convey their enthusiasm for the latest cinema offerings to a waiting world.

The annual dinner, always a glittering social event, this year was a particularly gala occasion celebrating the Association's twenty-first birthday. Six of the Association's thirteen past presidents graced the speaker's table, and a magnificent birthday cake and gifts for all those present were some of the charming features arranged by the Milwaukee hostesses. Table decorations characteristic of Wisconsin's famed forests had been provided by the Wisconsin Conservation Commission.

Each year another lustrous page must be added to the Association's saga of eating, for an earnest and unflagging attention to the stellar culinary attractions of each region in which the annual meeting is held has now become an established yearly feature. Milwaukee proudly lived up to tradition in this respect, beginning with the *kaffee klatsch* for the Executive Committee, the greatest cake eating event in the memory of this writer; followed by the Wisconsin Cheese Party; and climaxed by the elaborate Milwaukee Day Dinner, the delightful *Abendmahl* buffet at the Wisconsin Club. The Cheese Party, amidst a charming rural background of decorations, displayed a noble array of domestic cheeses for which the dairy state of Wisconsin is famed; enlivened the scene with old country costumes, dances and songs, and the current season's lovely young Dairy Queen; and manufactured and exhibited under the very eyes of the entranced onlookers, the largest cheese, we understand, ever made in captivity!

This and all the other gracious hospitality, under the capable direction of Nell Clausen and Ethel Keating, combined to make the Milwaukee meeting a glorious event. Even the weather man was under control and provided five sun-swept days filled with the gentle tang of the autumn and freshened by breezes from lake and forest.

The formal program, arranged by Margaret C. Hessler Brookes, was thought-provoking, well rounded and inspiring. The educational and commercial exhibits were unusually complete and instructive. Mr. Arnold Shircliffe's display of his famous collection of menus was undoubtedly the most generous gesture ever made at an annual meeting by an individual member of the Association. These rare and almost priceless souvenirs of the eating exploits of bygone generations provided the right touch of historical interest in the midst of a meeting keyed to the vast and growing demands of today.

The British Dietetic Association

Among the more inspiring features of the recent annual meeting was the presence of two representatives of sister

organizations at the banquet, Margery Abrahams of the British Dietetic Association, and Annie Laird of the Canadian Dietetic Association. The last needs little introduction to American Dietetic Association members since for many years dietitians in the states have recognized no national boundary line between the two great countries of North America. Miss Laird is one of the charter members of the A. D. A., and Toronto will long be recalled as the scene of a most memorable annual meeting of the A. D. A. in 1930.

The British Dietetic Association of which we heard first through its representative, Isabel Mills, at the Boston meeting in 1936, was formed in the same year with nearly sixty foundation members. Since then the association's progress has been rapid and distinguished. A fine sense of solidarity among dietitians of the English speaking countries is indicated in the following summary of an address by Margery Abrahams of St. Bartholemews Hospital, London, at the annual banquet in Milwaukee:

It is an honor to have the opportunity to bring you cordial greetings from members of the British Dietetic Association at this coming of age banquet of the American Dietetic Association.

I do not feel a stranger amongst you since like all my generation of British dietitians I received most of my dietetic training over here. We reversed the voyage of the Mayflower taking with us the inspiration and knowledge which you had given us and which we have tried to adapt and to add to in our own country.

Nowadays our students can receive their education in England but the "Grand Tour" of your institutions is still their ambition. I should like to take this opportunity to thank you most sincerely for the marvellous way in which you have given us of your time and knowledge. We hope it may be possible some day to develop these visits into some scheme for the exchange of dietitians between our two countries. Meanwhile may I extend to you on behalf of the British Dietetic Association a most cordial invitation to visit us and our institutions. We will try in some small way to make your visits as pleasant as ours have been over here. Our secretary, whose name is somewhat symbolical of our Anglo-Americanism, Miss Elizabeth Washington, dietitian at University College, will be delighted to help you in any way.

Again may I thank you for all the kindness other dietitians and I personally have received. We are working in our two countries for the common cause of science and for the improvement of man's material well being. Let us hope that we may thus contribute, in our own way, to the wider cause of international peace and understanding which is so sorely threatened today.

Food Poisoning Caused by Bacteria or Their Products[1]

It is important for all individuals handling foods to have some understanding of bacterial food poisoning in order to guard against outbreaks of this nature. Some bacteria may grow in certain foods and elaborate toxins, thus giving rise to intoxications, whereas others do not produce such poisons and give rise to infections. Examples of the former type, due to preformed toxin, are botulism and staphylococcus food poisoning. The latter type, producing infection, is represented by typhoid fever, bacillary dysentery, Salmonella and food poisoning caused by certain

[1] Abstract of address presented by Gail M. Dack, Ph.D., M.D., before the American Dietetic Association, Milwaukee, October 12, 1938.

types of *alpha streptococci*. The term "ptomaine" poisoning is meaningless, yet is still carelessly applied to some types of bacterial food poisoning. This term refers to no definite chemical entity and is being abandoned by chemists. None of the so-called ptomaines are actively poisonous when taken by mouth, and even the active ones do not produce nausea, vomiting, colic and diarrhea.

Botulism is a dramatic, highly fatal type of food poisoning. The causative organism, *Clostridium botulinum*, is present in the soil. Since it forms spores that are relatively resistant to heat, it may grow and elaborate toxin in underprocessed canned foods. In such foods inadequate heat may destroy many other organisms, often leaving this one in pure culture. The organism is a strict anaerobe and will grow well in dead plant or animal tissue of relatively low acidity. The commercial canners are well aware of this problem and have protected the foods which they pack, by adequate processing. There has been no case of botulism resulting from eating commercially canned goods packed in this country within the past twelve years. Most of such cases occur from the use of the cold pack method of home canning which was so widely recommended at the time of the World War.

Staphylococcus food poisoning results from eating food in which certain strains of staphylococci have grown and produced enterotoxic substance. The incubation period may vary from one to five hours, but is usually three to four hours. The onset of illness is sudden, with nausea, vomiting, marked prostration and diarrhea. Sometimes the stools and vomitus contain blood. Not all strains produce enterotoxic substance. At present there is no way of differentiating these strains except by feeding tests on kittens, monkeys or human volunteers. Since the staphylococcus grows normally on the skin and in the throat and is a normal contaminant of air, it has ready access to food. Outbreaks of this type of food poisoning are now being commonly recognized. The staphylococcus will grow in the presence of large concentrations of salt and sugar in amounts which are frequently used partially to preserve certain foods. A wide variety of foods have been implicated in outbreaks of staphylococcus food poisoning, such as milk, cheese, cake, custard filled bakery goods, tongue sandwiches, and so on. The largest number of such outbreaks have been traced to custards and bakery goods containing them.

Considerable study has been given the staphylococcus enterotoxic substance. Boiling for thirty minutes does not destroy it. There is some evidence that immunity to this poison may be produced in animals. The chemical nature of the enterotoxic substance, at present, has not been identified. The control of staphylococcus food poisoning depends upon adequate refrigeration of foods in which this organism grows.

Of the food-borne infections, typhoid fever is perhaps the best known. The story of Typhoid Mary has publicized this mode of spread. The rôle of dysentery bacilli in food-borne infections is not so clear as in the case of typhoid. In view of recent work in this field more attention should be given this problem.

Salmonella or paratyphoid food poisoning has been known for a great many

years. The natural habitat of these organisms is the intestine of animals. When man eats food containing large numbers of these organisms, symptoms of nausea, vomiting and diarrhea, with abdominal cramping, may occur. The incubation period is longer than for staphylococcus food poisoning and may vary from twelve to forty-eight hours. Evidence indicates that this food poisoning is due to infection rather than to intoxication. The control of Salmonella food poisoning involves protecting foods from rodent carriers and preventing the use of improperly cooked food from infected animals.

Some streptococci of the *alpha* type have been found in food poisoning outbreaks. The incubation period in proved outbreaks of this type averages about twelve hours. The living organisms, and not culture filtrates, have produced symptoms in human volunteers.

CURRENT COMMENT

Report of the Joint Committee on School Cafeterias

The appointment of the joint committee of the American Home Economics Association and the American Dietetic Association was completed early in 1938, and after some correspondence among the members, it was decided to get in touch with all state presidents of the two associations. The purpose of the letter was to inform the presidents of the appointment of the joint committee, to suggest the presentation of topics dealing with school feeding at state and local meetings, and to make inquiry regarding possible interest in a regional conference of those interested in such problems.

Such a letter was therefore sent to all state presidents of both associations. The response was encouraging. At least 30 presidents indicated interest in the work and their willingness to consider the suggestions made.

On May 21 a meeting of the joint committee was called in New York City. It was attended by Katharine M. Ansley, Constance C. Hart, Mary C. Kelly and Mary deGarmo Bryan. At this meeting it was decided:

(1) To correspond further with persons who had responded to the original letters from several areas with the possibility of developing regional conferences during the coming year. Since the national meetings of the associations were to be held in Pittsburgh and Milwaukee and since school feeding topics were to be presented on both of these national programs, it was decided to concentrate on other areas for the coming year; namely, Northwest, Southwest, Central, South, Middle East Coast, and Eastern. In this correspondence it was urged that these conferences be study groups rather than the routine type of convention.

(2) The committee also agreed to make inquiries regarding an excellent suggestion made by Mary Kelly to the effect that the committee assist in the establishment and management of a new experimental cafeteria set-up to be undertaken in a school contemplating a new building in the near future. Such inquiry has been made and it seems

likely that the plan for this project will soon be under way.

(3) The committee is deeply interested in the tentative course for apprentice training for school lunch managers now being worked out by the committee of which Winning Pendergast is chairman, and would like to foster the establishment of such training courses in several areas. There is considerable concern over the lack of well trained persons for school cafeteria positions, particularly when the position involves teaching of home economics courses as well. Many persons are recommended for their ability to teach who have had no training in institution management or quantity cookery. Their performance in the management of the cafeteria is frequently unsatisfactory and reflects on the home economics trained women in this field.

(4) The advisability of collecting material of value to school cafeteria managers at a central point from which it may be easily accessible, for example, the central office of the American Home Economics Association or the American Dietetic Association, was emphasized by the committee.

(5) It was suggested that the committee be continued for the ensuing year.—MARY DEGARMO BRYAN, *Chairman, Teachers College, Columbia University, New York City.*

FRENCH-CANADIAN DISHES OF THE HOLIDAY SEASON

Having lived most of my life with French Canadians, I find that many of their food habits and customs have developed from the limitation of their environment, their religious and festival holidays, and their naturally painstaking manner of making rather elaborate dishes characteristic of each celebration—be it one associated with great abundance or scarcity. The people celebrate Christmas day almost wholly as a religious day. Midnight mass, which is celebrated Christmas eve, is followed by much gaiety and feasting; it is at this time that *patés* or *tourtières* are served in nearly every household; these are made of rough paste filled with minced pork.

Tourtières au porc frais

On hache le porc-frais bien fin, avec oignon et assaisonnement, on le fait revenir dans la poêle, ensuite on le met dans un plat garni de pâteé. On le couvre de pâte, laissant une ouverture au milieu, pour un bouquet de pâte, qu'on lève avec soin quand le pâté est cuit, pour jeter un peu de jus qui a été conservé, ce qui empêchera le pâté d'être sec.

Diner de Noël commences with soup, followed by fish, usually scallops prepared with white wine and seasonings and served with a cream sauce. The entrée is often sweetbreads and mushrooms, also prepared with wine. This is followed by roast turkey and the usual legumes. For the sweet, we have a *pyramide* with an ice cream center covered with meringue and spun sugar. Of course there are many variations of this and as I look over the first French-Canadian cook book printed, I find many of the recipes are almost beyond the purse of the average person of today. For example, we find such luxuries as pigeon stuffed with *pâté de foie gras* and cooked in wine.

The correct way to prepare the *pâté de foie gras* is with goose livers, yet everyone of my French-Canadian friends of

whom I inquired, prepare this dish today with calves' liver. The liver is passed through the mincer and to this is added minced unrendered lard, with onions for seasoning. The pan is lined with slices of salt pork into which the liver mixture is poured. This is baked in a slow oven, and sliced and eaten when cold.

My mother-in-law, who belonged to one of the old seignorial families, used to tell me how her mother supervised her kitchen before festive seasons. Foods were prepared weeks in advance, and usually some of the foodstuffs and game were given to the seignior in payment of taxes owed by the inhabitants of the seigniory. I can still see the shelves in the pantry filled with *pâtés*, *tête en fromage*, and *paleron de porc-frais*.

Paleron de porc-frais is a shoulder of fresh pork which has been boned and rubbed well with garlic and roasted in the oven. This is served cold at luncheon with *graisse de rôti*, which consists of the drippings from the roast poured into a bowl and then turned out with the deep brown jelly on top. This was used in place of butter and considered a great delicacy.

Until "little Christmas" (January 6) is past, there is always feasting and celebrating.

From the settlers of early Quebec, for whom corn-meal and cracked peas were dietary staples, two famous recipes have been handed down from generation to generation. The winter season is the time when all French families enjoy *potage au Quebec* or *potage aux pois*, and *pains millets de Blé d'Inde*.

Potage au Quebec is made of cracked peas which have been allowed to stand in water overnight; to this is added salt pork, and it is then thoroughly cooked. Today, celery and small carrots are sometimes used for added flavor.

In the partridge season, the French-Canadian dish, *perdrix au chou*, is unsurpassed.

Perdrix au choux

Faites frire quatre oignons hachés bien fin avec une poignée de pain émietté; on ajoute poivre, sel, persil, sarriette et thym dans un peu de saindoux; on insère cette farce dans le corps de la perdrix que l'on barde et saupoudre de farine; on la fait rôtir lentement dans du saindoux, et on la retire de dessus le feu; on hache un petit chou avec quatre oignons, poivre, sel, persil, sarriette, on fait rôtir ces derniers dans la sauce; quand ils sont cuits, on ajoutte un demiard d'eau; on laisse le tout encore une heure sur le feu, le remuant de temps en temps avec précaution. On place deux morceaux de pain grillé ou rôti dans le fond du plat avant de le servir.

In the spring, at the sugar camps, when the maple syrup is boiling, it was customary, for an added treat, to drop in eggs which when cooked were eaten with the syrup. This is also done in the homes, in a smaller way, and the eggs served as a luncheon dish.

On St. Catherine's day, the twenty-fifth of November, taffy is made for the children, and all the young girls feel they will never marry if no taffy is eaten on that day. This custom of making taffy originated when Sister Marie de l'Incarnation was trying to persuade the Indian children to come to school; as an inducement, she always gave them taffy and gradually this custom grew until now it is always prepared in the homes in celebration of the day.

When I was bringing this to a close, Lucienne, my little French maid, said,

"Ah! Madame, you have forgotten *Ragout de boulettes*". This is a very popular dish consisting of a stew prepared with paste similar to dumplings.—FLAVELLE TAILLON *Ottawa General Hospital, Ottawa, Ontario.*

THE ETHICS OF TEACHING PATIENTS[1]

The dietitian's responsibility in the teaching of the patient is to interpret the physician's food orders in terms that the patient can understand. Such teaching is a fine art requiring fine tools. Knowledge of the basic facts of nutrition should be so well mastered that they do not require conscious effort to recall them. The dietitian should express these facts simply and directly. Human interest in the patient's food problem should always be considered first. The home background, food habits, financial status, education and time for food preparation are all necessary for a proper evaluation of the patient's problem. This training in teaching should be an important part of university and student dietitian courses.

The interpretation of the physician's food prescription requires tact, sincerity and skill as well as wisdom. Not long ago I talked to a doctor specializing in metabolic diets. He employs a dietitian to teach his patients. I asked him for a frank opinion of her value to him. He spoke approvingly and then more thoughtfully as he saw I wanted constructive criticism.

He said "Dietitians often do not get their message across to the patient. Their meaning is concealed in theoretical wordiness. They do not realize that teaching is a matter of give and take." He gave as a case in point a man he had sent to the dietitian for diet instruction. The physician was convinced the man would need half an hour spent on this important part of his therapy. Therefore he was much surprised to see the patient leaving the dietitian's office after ten minutes time. The dietitian had gone over the essential points of the diet regime but had failed to check up on the patient's reaction. As a result, the doctor did not accomplish his purpose. The question arose in the physician's mind as to whether dietitians take their work as seriously as they should. This may also have occurred to the patient.

Unless the dietitian is both conscientious and capable the instruction is often inadequate. How can a dietitian know that her teaching is effective unless she asks questions and determines the patient's mental response? Nothing is more surprising to the novice after teaching a patient for several minutes than to find that some simple question elicits no intelligent response from the patient. His mind has probably been wandering to any one of a hundred problems. The doctor has just told him he has diabetes, or heart trouble. Perhaps his wife has to work and so meal preparation is a problem. Any way you look at it, the diet will be likely to interfere with his daily program no matter what his work and activities may be. These considerations in the patient's mind constitute a blank wall beyond which he cannot see. You must, with all the kindness and understanding possible, direct his attitude in keeping with the doctor's wish that he learn his food program.

[1]Presented before the breakfast meeting of the Heads of Home Economics Departments and Directors of Approved Training Courses, Milwaukee, October 11, 1938.

Early in my work as a dietitian, I found the following attitude among many of my associates. Some of these young women, attempting to teach patients, seemed to have a superiority complex which made them feel they knew more about nutrition than the physician or nurse could possibly know. This attitude hardly added to the dietitian's popularity. Granted even that they had superior knowledge of the subject, they reckoned without their host. For the patient knew about doctors and nurses, but he did not know about dietitians. He still, sometimes, does not know much about them or their subject!

The field of direct instruction to the patient by the dietitian is practically untouched. The physician and nurse know the patient and work cooperatively for his good. But we, too often, have failed because we do not acquaint the patient with the simplest possible variations from normal nutrition that will meet his or her needs. We have failed because we have not made the doctor's dietary prescription tangible to the patient.

In order to do this part of the dietitian's work with sincerity, we must, first of all, like teaching as well as human beings. Phillips Brooks says: "Joy in one's work is the consummate tool without which the work may be done indeed, but without its finest perfectness. Men who do their work without enjoying it are like men carving statues with hatchets." The dietitian must merit the confidence of the physician and the patient. She must be a ruthless critic of her work and set up her own standards. She must report to the physician any failure she may encounter in her teaching, and work out new methods of approach with him. Irreparable damage may be done if the dietitian fails to cooperate fully with the physician in the instruction of his patients. Adequately equipped with knowledge and ability, she can be an invaluable aid to the physician in the instruction of his patients.—HELEN B. ANDERSON, *The Scripps Metabolic Clinic, La Jolla, San Diego, California.*

A QUESTIONNAIRE FOR THE WOULD-BE DIETITIAN

When a student at Women's College indicates a desire to become a dietitian she is presented with the following questions which must be answered with sincerity:

(1) How many food dislikes do you have?
Do you eat a wide variety of foods?
Do you like to eat?
Do you drink milk?
Do you follow the principles of good nutrition?
Do you have good health?

(2) Do you like to cook?
Are you ever on the alert for new ideas in food preparation and service?
Are you interested in the use of leftovers?
Do you have a knack for making food attractive?
Are you interested in the food of different sections of this country?
Are you interested in the food of different nationalities?
Are you a good taster?
Are you "cost-conscious"?

(3) Do you like to direct the work of others?
Do you object to long and irregular hours of work?
Do you like to teach others?

Do you have good "sales resistance"?
Are you calm in emergencies?
Do you meet people easily?
Are you familiar with the various possibilities for positions as a dietitian?
How many dietitians do you know?

It is to be conceded that favorable answers to the above questions cannot serve as the only criterion for judging individual fitness or ability, but on the other hand a high per cent of unfavorable answers would indicate either the need of a revision of attitudes or the directing of interest into other fields.—HENRIETTA C. FLECK, *Women's College, Newark, Delaware.*

BOOK REVIEWS

The American Illustrated Medical Dictionary. Eighteenth edition. By W. A. Newman Dorland, M.D. and E. C. L. Miller, M.D. Philadelphia: W. B. Saunders Company, 1938, pp. 1607. Price $7.50.

This 18th edition of an unquestionably authoritative reference comes at a time when it is greatly needed. The many word additions to the scientific literature, changes in spelling, terminology, and so on, make this book one of the most essential references required by the up-to-date dietitian. More than 5000 new words appear in this edition; the terminology conforms to the standards adopted by the American Medical Association, Society of American Bacteriologists, American Chemical Society and other scientific bodies. It tells you when and when not to capitalize a word. It gives correct pronunciation, derivatives and the historical aspects of words. Complete anatomic tables are included, chemical symbols and formulas, and a summary of the accepted vitamin terminology to date. An amazing number of abbreviations are included, all of which are clearly explained. With regard to definitions, not only is the root word defined but also each root word derivative.

In a sense this volume is a digest of the practice of medicine, for included therein are all recognized signs and symbols of diagnostic value, particularly the new ones; methods of treatment; dosage table; a complete list of the various serums with indications for their use; a section of 32 pages giving descriptions of tests in current use; a practical laboratory manual of reactions, staining and fixing methods; the name and technique of every operation; medical biographies, which includes short biographic sketches of the "fathers of medicine" whose names have been given to diseases, procedures, and so on.

The general perfection of this book leads one to call attention to one or two very minor errors which it is hoped will be corrected in subsequent printings. For example, "black-tongue" appears alphabetically as one word; in the digest of the subject, included under vitamins, it appears as two words. "Flavon", under this same summary, appears without the "e", whereas alphabetically and also under "citrin" it is spelled "flavone". "Dietitian" no longer appears as "dietician" but "diet therapy" continues as "dietotherapy".

Bulletin of the Health Organisation of the League of Nations. New York: Columbia University Press, International Documents Service, 2960, Broadway, 1938, pp. 430–607. Price 65 cents.

This third number of the 1938 volume of the Bulletin reveals the wide scope and variety of the work of the Health Organisation. Included is a report of a method of assaying the content of morphine in opium, and of cocaine in raw cocaine and coca leaves; a report on the problem of insulation and lighting in relation to housing and town planning; and reports on three technical investigations—one on undulant fever in France, another on the significance of codeine as a habit-forming drug, and the third on the comparative value of certain reactions for the sero-diagnosis of syphilis.

The report of the third session of the Technical Commission on Nutrition describes the state of knowledge concerning the requirements of the human organism for various nutritive elements, including vitamins, and especially during the first year of life. One chapter deals with milk, a foodstuff of the first importance which must be prevented as much as possible from becoming a vehicle of infection. Another discusses methods of carrying out surveys on nutrition and on the nutritional conditions of populations. A short section is devoted to nutrition problems of the Far East. Attention is likewise directed toward the proposed formation of a National Nutrition Committee in Chile.

The members of the Technical Commission on Nutrition after calling attention to mineral requirements, namely calcium, phosphorus, iron and iodine, needing special consideration, set tentative standards for the known vitamin factors. Vitamin A requirements for the adult may be safely met within a range of 2000–4000 I.U. The requirements during pregnancy and for infants and growing children are relatively greater than for adults. Under vitamin B_1, where no mention is made of the term thiamin, requirement of the 70 kilogram adult is set at 300 I.U. or 10 I.U. per 100 calories of food intake.

Under vitamin B_2, stated as including ribo-

flavin, lactoflavin, the pellagra-preventive substance, and other factors, the physiological and nutritional significance of which is at present obscure, a list of foods is given, any one of which furnishes an adequate amount of the pellagra-preventive vitamin for the adult. Under vitamin C or ascorbic acid, the adult's requirement is said to be "no doubt covered" by 30 mg. daily.

In summary the commission states that artificially fed infants should receive a ration of fruit juice from the second week of life to provide extra vitamins C and D, and also a small dose of fish-liver oil, gradually increasing with the age of the infant, to provide extra vitamins A and D. They again call attention to the great value of egg yolk as a source of iron for infants, recommending, however, that only yolk be given to infants under six months of age.

They reiterate a statement appearing in a former report that "the practice of giving cereals before the age of six months is not advised; after this age, the use of potatoes, suitably prepared, is advocated, as a partial or complete substitute for cereals". They further suggest that liver be recommended in addition to the lean meat and white fish mentioned in previous reports.

Automatic Menu Maker, 90 Menus—406 Recipes. By Ruth M. Hornsby. Stamford, Conn.: The Dahls, 1938, pp. 88. Price $2.00.

This is the 84th volume in The Dahls' library of books for foods served in quantities.

The appendix of 19 pages gives 30 well balanced menus as suggestions for breakfast, dinner and supper. Recipes for each suggested dish or service are given in the book proper. Each recipe has a cross reference code-letter and figure with the menu suggestion. These recipes have been thoroughly tested on a 50-portion standard with complete procedure for preparation. They are classified and grouped as breakfast, dinner and supper in the sequence of the suggestions.

The table of weights and measures as it stands would bear some improvement. For instance, under apples it is not indicated whether they are dried or fresh; under beef, whether A.P. or ready for the range; broccoli, whether trimmed or untrimmed. No clear indication is given in regard to the size of eggs in shell, or as to grapefruit, olives, oranges or pears. Under lamb there is no clue as to which cut is to be used. There is incomplete information on size of the portions yielded from each recipe. Temperatures for baking and deep fat frying appear but intermittently and if given are rather vague. This table includes weights and measures for 136 products commonly used.—ADELINE WOOD, *Mount Sinai Hospital, New York City.*

A Dictionary of Food and Nutrition. By Lulu G. Graves and Clarence Wilbur Taber. Philadelphia: F. A. Davis Company, 1938, pp. 423. Price $3.50.

The authors freely admit, in the words of Pliny, "that many things may be added", for it is doubtless true that no dictionary ever written has fully met the demands that have been put upon it. Within this small book, however, a vast amount of information in condensed form has been assembled. The authors have attempted to include only definitely established data and methods. They have compiled as many food items, including many of the newer fruits and vegetables, as was practical.

As a reference in food classes this book should be of considerable help. It has many excellent features; namely, the tables of uncooked and cooked fruit equivalents, temperatures for refrigeration, and the very legible tabular arrangement of the nutritive value of foods. The attractive binding, flexible covers and thumb index add to the book's interest.

Foods, Production, Marketing and Consumption. By Jean J. Stewart. New York: Prentice-Hall, Inc., 1938, pp. 737. Price $3.25.

The approach of this new book is refreshingly different. As the author states in her preface, one purpose of the book is to lead individuals to think of food problems and discover their proper solutions. Therefore the thinking consumer should be aware of the many essential and economic interrelations that may have a very far-reaching influence on the problem of food. The chapter headings are divided as follows: man's relation to food problems; high carbohydrate foods: the starches and sugars; foods rich in starches and sugars;

fresh fruits and vegetables; the preservation of food; fats and oils; dairy products; meat and fish; poultry and eggs; beverages; the food needs of the individual; the food needs of the family; the food needs of a nation.

Each chapter covers much more than its title indicates. Under fruits and vegetables, for instance, the author includes not only due consideration of the nutritional features but follows through with full details regarding the care and preparation of fruits and vegetables; the buying seasons; trends in production; consumption; and so on.

Extensive references are included, as well as tables showing the per capita consumption of foodstuffs in the United States since 1889; the shipping season of fresh fruits by states of origin; buying guides for vegetables and fruits; and definitions for various grades of milk as stated in the United States Public Health Service Milk Ordinance.

The author includes as well a personal health data chart; the customary height, weight, age tables; data useful in cooking; patterns for meal planning; score cards for foods and service; and table service and invitations.

International Health Division, Annual Report of the Rockefeller Foundation. 49 West 49th Street, New York.

This report covers problems of public health and tropical medicine in a number of countries, being chiefly concerned with the prevention of yellow fever, influenza, tuberculosis, yaws and syphilis, worm diseases, rabies, various fevers and malaria.

Canned Food Recipes for Fifty. Information for the Canned Foods Shopper. Home Economics Division, National Canners Association, Washington, D. C.

This is an excellent collection of recipes in which canned products are the chief ingredients. The work was directed by Bessie Brooks West of Kansas State College, assisted by Sina Faye Fowler and Sally Bancroft. The recipes are representative of all classes of canned foods and wherever possible basic recipes have been developed that are susceptible of wide variation. The booklet should be of great assistance to the institution food manager. The second booklet, as its title indicates, gives helpful facts to guide the shopper. It not only tells what goes into the can but what happens to it in the canning process. Included is a list of over 300 varieties and combinations of canned foods now available.

CURRENT LITERATURE

American Journal of Digestive Diseases

Vol. 5, October 1938

*The triple mechanism of the chemical phase of gastric secretion. B. P. Babkin.—p. 467.
*Studies on the use of aluminum hydroxide gel in the treatment of peptic ulcer. E. S. Emery.—p. 486.
*The level of ascorbic acid in the blood and urine of patients with peptic ulcer. D. T. Chamberlin and H. J. Perkin.—p. 493.
*The regulation of gastric emptying time. J. E. Thomas. —p. 523.

GASTRIC SECRETION. Gastric secretion, during its chemical phase, is regulated by a triple mechanism: (1) A pyloric hormone acts directly on the gastric glands. (2) Certain food substances stimulate the gastric glands after being absorbed by the intestines. (3) Some of the absorbed products of digestion act on the vagal centers in the brain. Various secretagogues, acting on different parts of the neuroglandular apparatus of the stomach, are of great importance in the selection of diets for patients with ailments of the gastrointestinal tract.

PEPTIC ULCER. Gastric contents can be completely neutralized by the use of colloidal aluminum hydroxide given by a combination of a continuous drip and oral method. Relief of pain occurs within 24 hours. This form of therapy should prove useful in treating patients with a marked hypersecretion who have been difficult to control by the usual alkaline powders.

ASCORBIC ACID IN PEPTIC ULCER. Hospitalized patients on ulcer management have lower levels of ascorbic acid in the blood and urine than normal individuals. Peptic ulcer patients require greater amounts of ascorbic acid. Daily medication of vitamin C results in an earlier and greater excretion of ascorbic acid in the urine in normal individuals and patients than in patients with peptic ulcer. Metabolism of vitamin C is influenced by activity.

GASTRIC EMPTYING. When food is ingested, the stomach begins to pour into the duodenum a complex mixture such as hydrochloric acid products of starch digestion and fat. Presently one or more of these substances accumulates in the intestines so as to excite the enterogastric reflex. The tone of gastric muscle diminishes, the intragastric pressure decreases and peristalsis grows weaker. The gastric motor activity increases if the emptying fails at any time to keep pace with intestinal digestion and absorption. Factors regulating overloading of the intestine are comprised chiefly within the gastric-inhibitory reflex and humoral influences.

American Journal of Diseases of Children

Vol. 56, September 1938

*Effect of a milk supplement on the physical status of institutional children. II. Ossification of the bones of the wrist. V. MacNair and L. J. Roberts.—p. 494.
*Minimal vitamin C requirements of artificially fed infants: A study of four hundred and twenty-seven children under a controlled dietary regimen. B. M. Hamil, L. Reynolds, M. W. Poole and I. G. Macy.—p. 561.

MILK SUPPLEMENT. The daily addition of a pint of milk to a rather mediocre institutional diet brought about an increased rate of osseous development, as indicated by the increase of ossification of the carpal bones. There was little observable difference between the group receiving irradiated evaporated milk and the group receiving plain evaporated milk. These children may have previously obtained enough vitamin D from playing in the sun all summer.

MINIMAL VITAMIN C REQUIREMENTS. The average vitamin C value of powdered lemon juice was found to be 0.84 mg. per gram, and the loss during the 24-hour period for which the formula was made up ranged from 17 to 33 per cent. The minimal protective dose of vitamin C for the average healthy infant is about 10 mg. per day. Scurvy is a definite pathologic entity which does not become evident or retard development until the absence of the specific physiologic functions of the vitamins is manifest. There is a distinct variability in individual susceptibility.

American Journal of the Medical Sciences

Vol. 196, October 1938

*The mental symptoms of pellagra. Their relief with nicotinic acid. T. D. Spies, C. D. Aring, J. Gelperin and W. B. Bean.—p. 461.

MENTAL SYMPTOMS OF PELLAGRA. Nicotinic acid in adequate amounts is a specific thera-

peutic agent for the acute mental symptoms of pellagra. The minimal dose of nicotinic acid has not been determined but seems to vary from case to case. Each patient with severe mental symptoms should receive a total of at least 500 mg. per day. All patients with pellagra should be given a well-balanced diet even though nicotinic acid is used.

British Medical Journal

October 1, 1938

*Income, diet and education in fifty representative South-east London families.—p. 223.

INCOME AND DIET. The amount of money available for food in 50 Southeast London families was investigated. Thirty-seven of these had not enough money to purchase minimum requirements after meeting household expenses and rent. Nineteen out of 20 families did not even have the necessary minimum daily caloric requirements.

Bulletin, New York Academy of Medicine

Vol. 14, October 1938

*Our vitamin B_1 supply in relation to human needs. R. R. Williams.—p. 641.

VITAMIN B_1 SUPPLY. All plant and animal tissues contain thiamin. Seeds, lean pork, and to a lesser extent milk and the internal organs of mammals are rich in this substance. The required proportion of thiamin to non-fat calories of the food is substantially constant for all species and all weights. Animals tend to waste any thiamin above their needs.

Journal of Biological Chemistry

Vol. 125, October 1938

*Cystinuria. VIII. The metabolism of crystalline egg albumin. E. Brand, G. F. Cahill and B. Kassell.—p. 415.

*The nature of vitamin A in cod liver oil. A. O. Tischer.—p. 475.

*Changes in lipid composition of nerves from arteriosclerotic and diabetic subjects. L. O. Randall.—p. 723.

CYSTINURIA. Superimposition experiments with methionine in a case of cystinuria showed that the excretion of extra cystine diminishes as the protein content of the diet increased. Feeding experiments with egg albumin showed that cystine and methionine were catabolized both qualitatively and quantitatively in the same way as when they were administered in the form of the free amino acid.

VITAMIN A IN COD LIVER OIL. A vitamin A ester has been isolated from Norwegian medicinal cod liver oil in the form of its dimaleic anhydride addition compound and has been identified as vitamin A palmitate. It is present in the oil to an extent of approximately 3 per cent of the total esters.

LIPID COMPOSITION OF NERVES. The phospholipid, cholesterol, cerebroside, neutral fat, and water contents were determined in the femoral, sciatic, and posterior tibial nerves from normal, diabetic, and arteriosclerotic subjects. The femoral, sciatic, and posterior tibial nerves from normal subjects did not show significant difference in composition. The peripheral nerves from diabetic and arteriosclerotic subjects showed marked decreases in phospholipid, cholesterol, and cerebroside, an increase in neutral fat, but no significant change in water content.

Journal of Health and Physical Education

Vol. 9, September 1938

*Relation of nutrition to optimal health. H. C. Sherman.—p. 406.

Vol. 9, October 1938

The functions of the nutritionist. H. Stone.—p. 482.

OPTIMAL HEALTH. Health should mean a positive quality of life. By increasing the proportion of protective foods in an already adequate diet, normal health can be built to a higher level. Nutritional improvement does not change hereditary factors but nutritional factors may have far-reaching effects through modifications of the body's internal environment.

Journal of Nutrition

Vol. 16, October 1938

*The production of manganese rickets in rats. A. R. Kemmerer and G. S. Fraps.—p. 309.

*The excretion of vitamin B_1 in the urine and feces. R. F. Light, A. S. Schultz, A. Atkin and L. J. Cracas.—p. 333.

A study of the biophotometer as a means of measuring the vitamin A status of human adults. L. E. Booher and D. E. Williams.—p. 343.

*Oxidative changes induced by a mineral deficient diet. M. Kriss and A. H. Smith.—p. 385.

*Anomalies in the bio-assay of vitamin D milk. K. Morgareidge and B. O'Brien.—p. 395.

MANGANESE RICKETS. "Manganese rickets" has been produced in rats by the substitution of

manganese carbonate for 2.5 per cent of calcium carbonate in a high calcium-low phosphorus rachitogenic diet, and also by the addition of 2.9 per cent of manganese carbonate to a stock diet of optimal calcium and phosphorus content. Vitamin D was effective in curing "manganese rickets" when added to a diet optimal in calcium and phosphorus, but only slightly effective when added to a diet low in both calcium and phosphorus.

EXCRETION OF VITAMIN B_1. Rats in vitamin B_1 excretion equilibrium excreted 25 to 35 per cent via urine and 20 to 30 per cent via feces. Animals with a previous history of low vitamin intake show a time lag before reaching excretion equilibrium.

OXIDATIVE CHANGES IN MINERAL DEFICIENCY. The respiratory quotients of rats receiving a diet deficient in inorganic salts were almost identical with those of control animals during the first month but during the second and third months the respiratory quotients of the low-salt animals were significantly lower than those of their controls. There were no significant differences between the specific dynamic effects of the diets. The increases in the total metabolism caused by the mineral deficiency were fully accounted for by similar increases in the basal metabolism.

VITAMIN D. Skimmed milk which has been fortified with vitamin D by the addition of concentrates exhibits an enhanced apparent potency which is approximately three times greater than the value expected. Feeding the concentrate and the skimmed milk separately to the same rats results in less enhancement of potency than does feeding the concentrate in the form of fortified skimmed milk.

Journal of the American Dental Association and Dental Cosmos

Vol. 25, October 1938

*Nutritional factors in dental development. C. D. Buttler.—p. 1599.

DENTAL DEVELOPMENT. Although great improvement in dental caries and alinement has been attained where known nutritional requirements have been met, the detection and correction of unheeded and unacknowledged deficiencies in diet and health will tax the ingenuity and combined skill of the dentist and the physician. Dietary factors as well as allergy and endocrines are discussed.

Journal of the American Medical Association

Vol. 111, October 1, 1938

*Vitamin C: Methods of assay and dietary sources. A. O. Bessey.—p. 1290.

Vol. 111, October 8, 1938

*The pathology of vitamin C deficiency. G. Daldorf.—p. 1376.

Vol. 111, October 15, 1938

The chemistry of vitamin C. C. G. King.—p. 1462.
*Height of American women. Current comment.—p. 1472.

Vol. 111, October 22, 1938

*Allergy in childhood. W. A. McGee.—p. 1551.
*Vitamin C: Pharmacology and therapeutics. A. F. Abt and C. J. Farmer.—p. 1555.
*International nutritional problems. Current Comment.—p. 1569.

VITAMIN C. Three different methods of bioassay as well as chemical methods are used for determining the vitamin C content of food. Adequate nutrition is a problem of supplying many factors in proper proportion which can be met only by use of a variety of foods. Ascorbic acid value depends upon the natural potency of the food and the consequence of aging and processing. Oranges, lemons, grapefruit, tangerines, tomatoes, fresh strawberries, green peppers and raw cabbage are among the richest sources of vitamin C. Properly prepared green leafy vegetables have good vitamin C value in spite of relatively large losses from cooking or canning. Variety, maturity, origin, storage, freezing and processing affect the vitamin C potency of fruits and vegetables. The vitamin C concentrations of individual foods are summarized in an accompanying table.

VITAMIN C. The anatomic effects of vitamin C deficiency are very prompt to appear and occur even in the mildest degrees of deficiency. Clinical reports agree that subclinical scurvy is common. The manifestations of vitamin C deficiency in the bones, teeth, gingiva, muscles, eyes and skin are discussed.

HEIGHT OF AMERICAN WOMEN. Women accepted for "standard" insurance by the Metro-

politan Life Insurance Company between 1922 and 1934 showed an average height (with shoes) of five feet four and one-half inches in middle adult life when full growth had been attained. This figure is identical with that obtained in two earlier insurance studies based on the material of several companies covering the years 1885–1908 and 1909–1927. These averages are not in conformity with observations on the heights of college graduates which indicate an average increase in height for college women.

ALLERGY IN CHILDHOOD. The care of allergic children begins *in utero*. In view of the frequency of abatement of clinically allergic symptoms during pregnancy, mothers should be warned to abstain from or eat cautiously foods they know have previously given trouble. Preventive measures given early reduce reactions and the need for subsequent serums in very young children. By elimination and diet correction and at times through specific antigen reactions, it is usually possible to hyposensitize or completely relieve allergic disorders in childhood and probably reduce the incidence and severity of allergic disorders of adult life.

VITAMIN C. Vitamin C is definitely indicated as a therapeutic agent in the prevention and cure of scurvy. Whether it has a definite causal relationship to any other pathologic process is uncertain. An ample supply is indicated in the diet of the pregnant woman and nursing mother. If the possibility of a prescorbutic state is accepted or if the existence of latent scurvy is recognized, it is imperative that adequate diagnostic methods and criteria be formulated in order to prevent the development of conditions such as suboptimal nutrition which would be deleterious to general health.

INTERNATIONAL NUTRITION PROBLEMS. At the International Physiology Congress recently held in Switzerland, it was pointed out that Europe and Asia have a relative sufficiency of energy-providing foods but a lack of protective foods. The present world imbalance in food supplies should be equalized. Size and weight are not necessarily the only or best criteria of biologic excellence, for many biologists feel that longevity is frequently curtailed by rapid and excessive growth. International discussions are helpful in that they tend to coordinate general world opinion on the important problems of human nutrition.

Journal of the Iowa State Medical Society

Vol. 28, September 1938

*The undernourished child. R. Stahr.—p. 435.

UNDERNOURISHED CHILD. Dietary inadequacy plays a definite rôle in producing undernourishment in childhood. The best evidence of the inadequacy of our diet is the presence of dental caries in about 80 per cent of children examined. It is not entirely poverty and lack of food which produce malnutrition. Our diet is chiefly deficient in calcium, vitamins A, C, D and G, in iron in infancy, in protein during childhood and in iodine in certain regions. The etiologic factors in the malnourished child may have relation to infections, infestations, heredity, diet, and disturbances of psychic, neurologic and endocrine origin.

New England Journal of Medicine

Vol. 219, October 6, 1938

*Progress in nutrition. F. L. Burnett.—p. 524.

PROGRESS IN NUTRITION. Fitness can never be obtained by physical measures alone, be they educational or recreative. The essential principles of nutrition must be followed. Research has proved that green vegetables and fruits are not luxuries but necessities. Many references to recent literature are made.

Ohio State Medical Journal

Vol. 34, October 1938

*Nutritional problems of the pre-school child. R. A. Lyon.—p. 1126.

*Management of obesity. E. P. McCullagh.—p. 1131.

PRE-SCHOOL CHILD. Marked degrees of malnutrition occurred in 5 per cent of the 12,262 children of all ages admitted to the Cincinnati Children's Hospital over a period of 11 years. Important predisposing factors of marked degrees of malnutrition in the pre-school age child are acute infection, congenital defects, and endocrine disturbances. Minor degrees of undernutrition often have as their basis poor habits of eating and inadequate amounts of rest. Treatment of malnutrition includes the elimination of organic disease, the planning of an adequate diet, and the institution of regular habits of eating and sleeping.

MANAGEMENT OF OBESITY. The important elements of a good reducing diet are: low caloric value, adequate protein content, adequate minerals, adequate vitamins, low carbohydrate and sufficient bulk. A sample 800-calorie diet is given.

Public Health Nursing

Vol. 30, October 1938

*Nutrition in pregnancy. A. F. Morgan.—p. 576.

NUTRITION IN PREGNANCY. Many of the supposedly inevitable discomforts and dangers of pregnancy have been found to follow from mistakes in diet and are avoidable. The total calories in pregnancy increase about 25 per cent after the fifth month. At the same time the protein requirement of one-half gram per pound of body weight increases to two-thirds gram per pound. Meat and eggs should probably be restricted in the last trimester, but milk, cheese, nut, cereal, and legume protein may be used. The calcium and phosphorus intake should be increased 50 per cent and the iron intake raised. Vitamins A, B_1, B_2, C and D are needed in increased amounts.

Public Health Reports

Vol. 53, September 23, 1938

*Studies on dental caries. VII. Sex differences in dental caries experience of elementary school children. H. Klein and C. E. Palmer.—p. 1685.

Vol. 53, September 30, 1938

*Mottled enamel survey of Bauxite, Arkansas, 10 years after a change in the common water supply. H. T. Dean, F. S. McKay, and E. Elvove.—p. 1736.

Vol. 53, October 7, 1938

*A simple method of concentrating vitamin E. C. G. Mackenzie, J. B. Mackenzie and E. V. McCollum.—p. 1779.

DENTAL CARIES. Results derived from an analysis of dental examinations of 2232 boys and 2184 girls indicate that the higher caries experience of girls, as compared with that of boys of the same chronological age, is explained quantitatively by the finding that girls, because their teeth erupt earlier than do those of boys, are exposed longer to the risk of attack by caries than are boys. Girls show no greater susceptibility to attack by dental caries than boys.

MOTTLED ENAMEL. The production of an unusually severe type of endemic dental fluorosis (mottled enamel) at Bauxite, Arkansas, was halted when a change was made from a common water supply containing toxic amounts of fluorides to one relatively low in fluorides. Twelve illustrative photographs are given.

METHOD OF CONCENTRATING VITAMIN E. A vitamin E concentrate has been prepared by the elimination of substances, insoluble in methanol at the temperature of dry ice, from the unsaponifiable fraction of wheat germ oil.

Science

Vol. 88, September 9, 1938

*Food standards committee of the food and drug administration.—p. 234.

FOODS STANDARDS COMMITTEE. The work of the Foods Standards Committee of the food and drug administration will be to formulate definitions and standards both of identity and of quality. This committee will meet at intervals to review the data which have been assembled, draft tentative standards, and then upon the conclusion of public hearings required by the Food and Drug Act, make its final recommendations.

INSTITUTION MANAGEMENT

The American Restaurant Magazine

Vol. 21, October 1938

*Patterson's pow-wow. C. A. Patterson.—p. 27.
*That menu is good! that menu is bad! L. D. Freeman.—p. 41.
*Sizing up your portions. G. F. Wensel.—p. 47.
Forty years in business and still growing. C. Kolb.—p. 79.

INCREASED SALES. Illustrates methods designed to increase the success of fall merchandising in restaurants.

MENUS. Increased sales are made possible by the content and set-up of the menu. The article gives several menu suggestions for various price groups.

STANDARDIZED PORTIONS. Stresses the importance of standardizing food portions in order to stabilize and estimate food costs more readily. Illustrates the dangers of aping competition, of high mark-up on small volume, and of small mark-up on large volume portions. The menu maker should know the cost of every cooked portion of food and train his employees to serve definite sized portions.

Buildings and Building Management

Vol. 38, October 1938

More efficient heating. C. P. Benneche—p. 21.
*Tested words that sell. E. Wheeler.—p. 26.
Dollars for decorating.—p. 28.
Rental policies and costs. T. F. Egan, Jr.—p. 41.

SELLING WITH WORDS. Successful salesmanship requires observation of a prospect's likes and attitudes to determine what specifically appeals to him. Examples of words with a high sales appeal are given.

Chain Store Age

Vol. 14, October 1938

*Record-keeping simplified for social security, wages and hours. F. E. Landau.—p. 12.
*An 8-point check system for store managers. W. M. Ferguson.—p. 22.

RECORD KEEPING. A summary of the payroll tax recording system used effectively by a limited price variety chain of more than average size, covering 33 states. Description and examples given of all cards kept on file and duties of all persons employed. Succeeding issues will discuss other methods of handling the records needed to meet the demands for data about employees as an outcome of the Social Security law.

CHECK SYSTEM. Efficiency of store managers measured by checking inventory, rapidity of turnover, increase in customers, increase in average unit sale, correct gross margin, low personnel costs compared to volume sales, advertising costs in line, and adequacy and standards of housekeeping.

Hospitals

Vol. 12, October 1938

*Satisfaction and economy in personnel feeding. M. L. Hines.—p. 112.

MEALS FOR PERSONNEL. A constructive article on the problem of providing meals satisfactory to the personnel at a cost satisfactory to the hospital. A clear statement of the benefits that have resulted from a cash allowance for maintenance.

Hospital Management

Vol. 46, September 1938

*Central food service. L. C. Levy.—p. 34.
Appetites lagging.—p. 37.

CENTRAL FOOD SERVICE. The central system inaugurated in the Dante Hospital, San Francisco, eliminated the rehandling of food and allowed the dietitian properly to supervise the service. States the advantages and economy that resulted from this system.

Horwath Hotel Accountant

Vol 18, October 1938

Reflections on present trends. G. O. Podd.—p. 2.
*Know your costs. A. D. McKenzie.—p. 2.
*An unexplored opportunity for saving. C. B. Conner.—p. 3.
*Food and beverage costs.—p. 7.

FOOD COSTS. Food cost is the most important variable of all restaurant costs. Control involves preventing costs from exceeding the allotted percentage while at the same time maintaining high quality of food and service. Proper records alone enable an accurate analysis of the cost structure. The most important records are: purchase specifications, standard recipes, standard portion sizes, production records, and sales by portions.

SAVINGS. Heat, light, power, and refrigeration are costs which are generally neglected. As air-conditioning becomes a necessity, these costs rise rather than decline. Any small saving in these items directly reflects a substantial decrease in operating expense. Hotels, on the average, spend 15% of their room sales or $12.00 an available room a year, on these expenses.

FOOD AND BEVERAGE COSTS. Food costs continued to decrease at a rate of 4% over the previous year during July 1938. Beverage costs were generally 3% lower than in July 1937.

Hotel Management

Vol. 34, September 1938

Building the modern bathroom.—p. 20.
Dictionary of plumbing terms.—p. 26.
Out of the red. N. J. Radder.—p. 30.
*Merchandising calendar.—p. 31.
*Before going on duty.—p. 38.
*How to select and train cashiers.—p. 39.
*Tips from a housekeeper's notebook. J. C. Van Ness and R. S. Bomford.—p. 46.

Vol. 34, October 1938

Highlights of the New York World's Fair, 1939.—p. 30.
Highlights of the Golden Gate International Exposition, 1939.—p. 38.
*Information on the new high speed and streamlined trains.—p. 42.
What's new in New York hotels.—p. 91.
A menu a day for October. F. Searing.—p. 92.
*Glamour in fall fashions.—p. 94.
*Restaurants in hotels of New York.—p. 96.
*Equipment news for October.—p. 108.

MERCHANDISING CALENDAR. Explains the importance of keeping a calendar for national holidays, athletic events, and seasons. Lists most popular events for October, November and December.

CASHIER'S APPEARANCE. This poster and article is one of a series created for positions in hotels and restaurants. A complete set would be valuable for employee training and improving employee morale.

CASHIER SELECTION AND TRAINING. Supplements the poster by explaining the qualities necessary for the selection and training of an efficient cashier.

HOUSEKEEPING EFFICIENCY. The savings secured through the use of helpful suggestions of many executive housekeepers are discussed. Helpful hints are listed—some old, some new—all necessary to cut down overhead operating costs.

RAILROAD INFORMATION. Complete chart of the railroads, trains, operating points, meals, and equipment on 12 lines from Boston and New York to Los Angeles.

UNIFORMS. Pictures of 6 model uniforms for maids and waitresses in new fall styles and colors.

NEW YORK HOTEL RESTAURANTS. A complete directory of New York Hotel Restaurants and their services. An excellent reference key permits an easy check of the services and facilities of any restaurant listed.

EQUIPMENT NEWS. New equipment includes a fruit juice dispenser for chilling the fruit as well as dispensing an exact amount; new gas ranges; automatic electric counter fryer; sanitary garbage pail; Polartron for refrigeration control; and a new deep fat fryer with either gas or electric fuel.

The Hotel Monthly

Vol. 46, September 1938

Food service on the Santa Fe's new streamline trains.—p. 17.
Royal Hotel, Front Royal, Virginia.—p. 23.
*New kitchens replace old ones.—p. 33.
*Hotel cleaning problems. T. S. Blair.—p. 37.
*Saving-space and steps in the kitchen.—p. 41.
*Prices after 10 P.M.—p. 50.

Vol. 46, October 1938

*Federal regulation of employer-employee relations.—p. 16.
*Kenmore Inn, Bel Air, Maryland.—p. 34.
*British bakers aided by American research.—p. 35.
*Hotel cleaning problems.—p. 40.

AIR CONDITIONING BENEFITS. The Hotel Berkshire, Reading, Pennsylvania, has cut costs by installing electricity and air-conditioning in dining rooms and kitchens, to 70% of the former cost for fuel and claims also a reduction of 12%–15% in meat shrinkage. Other results are a cleaner and cooler kitchen and a 35% sales increase. L. E. Whitney of the Hotel Kenmore, Boston, believes improved working conditions and saving of foodstuffs resulted from a new electrical installation in the kitchen that included an individual-unit control steam table.

DISHWASHING. Approximately ¼ cent of the dollar is spent upon cleaning powders and dishwashing but its use will make or break the profits. Operators should be instructed carefully and in detail. Dishes should be well scraped, machines and water kept clean. Temperature and quantity of washing agent vary with food served. Correct rinse time is important. Charging and replenishing machines is an individual problem. Daily cleaning and

oiling lengthens life of machine. Remember that glasses can and should be so washed as to require no hand polishing. Sterilizers are the newest safeguard. The popular form is a chlorine powder used in separate machine after washing and rinsing.

KITCHEN TIME SAVERS. An especially built salad station meets the requirements of compactness, show room appearance, durability, adequate storage and rapid preparation. Open cold "dole plates" simplify rapidly moving cold dishes. Dole plates contain refrigerating coils in brine for uniform coldness on all sides. A separate compression unit is used as the shelves require a temperature 6–10° above zero. The center of the unit contains cold drawers for the storage of vegetables, fruits and service ware. Materials used are cork and monel metal. Drawings show fabrication of adjustable shelves, sliding shelves, position of cold shelves and complete unit.

EVENING PRICES. The Dishler Wallick Hotel, Columbus, Ohio has attracted attention by low but still profitable evening prices. Five menu specialties in effect after 10 P.M. are: fried country ham and egg sandwich on toasted white bread—15¢; delicious Swiss cheese sandwich on rye or white bread—10¢; jumbo hamburger on milk bun with pickles and Spanish onion—10¢; hot frankfurter on milk bun with sweet relish—10¢. The hotel does not lower food standards but keeps the crowd after 10 P.M. therefore gaining on the beverage revenue.

EMPLOYER-EMPLOYEE RELATIONS. Practices that result from labor legislation and collective bargaining are the reasons for the relatively few strikes in England. Government impartiality, striking procedure, emphasis on law observance rather than enforcement, and risk assumed by the workers are a few of the important contributing factors.

KENMORE INN. A unique source of income is a large lettuce bed which supplies the inn with lettuce and creates a saving large enough to allow for the planting and caring for all the beans, peas, beets, and lettuce used.

AMERICAN TYPE CAKE. British bakers have coordinated industrial scientific research accomplished in America to improve upon their products. The American type cake is in reality a perfected result of research.

HOTEL CLEANING. The importance of using the right cleaner on walls, floors, marble and tile surfaces in maintenance is stressed. A good cleaner must be analyzed from the standpoint of its cost, efficiency, and safety before its true value can be determined. Mopping methods, methods for cleaning painted surfaces, and floor cleaning hints stress the intelligent use of a well-developed technique to assure best results.

Journal of Home Economics

Vol. 30, October 1938

*The new food, drug, and cosmetic bill and the home economist. R. deF. Lamb.—p. 545.
*Food control. D. F. Magarrell.—p. 558.
*Tested recipes for better food. M. L. Casteen.—p. 559.
*Food for health in the school cafeteria. H. D. Petry.—p. 559.
*Specifications for food purchasing. M. Farnam.—p. 560.

FOOD, DRUG AND COSMETIC ACT. Explains the task before home economists to educate the public regarding the new Food, Drug and Cosmetic Act. The important features of the act are explained and the need for the continued support of the Food and Drug Administration facilities by women's organizations is stressed if the act is to be made an effective consumer law.

FOOD CONTROL. Objective of United Air Lines food control system "to provide information which makes possible the detection of weaknesses and unwarranted losses in food handling" aboard passenger planes is stated.

TESTED RECIPES. Marie Casteen evaluates tested recipes by citing 7 points to be considered in using tested recipes and 4 advantages that will result when tested recipes are so used.

SCHOOL CAFETERIA. Since school authorities do not always realize the important effect the school cafeteria has upon the nutrition of the children, time must be taken to develop a nutritional program in connection with school lunchrooms that will be incorporated in the educational program of the school.

SPECIFICATIONS. A good specification states precisely what is expected of the bidder, in clear, simple and understandable language based upon government standards. Specifications should protect both buyer and seller. Goods purchased should be tested and checked by buyer according to the specifications under which goods were delivered.

Modern Hospital

Vol. 51, October 1938

*Evaporated milk in allergy. M. Eichelberger.—p. 94.
*Set-up for central service. A. McKowan.—p. 98.
*Germ-free dishes.—p. 114.

EVAPORATED MILK IN ALLERGY. This form of milk can be used for many individuals having some form of milk allergy, since the heat of sterilization produces a milk easily and quickly digested and assimilated.

FIFTY BED SET-UP. Duties of the dietitians in a fifty-bed hospital are listed where centralized service has proved convenient and satisfactory.

GERM-FREE DISHES. An abstract of the investigation of the prevalence of bacteria in machine dishwashing conducted at the Army Medical Center, Washington, D. C. Bacterial deposits were found in the wash and rinse water of both single tank and double tank machines. After tests the following procedure was found to reduce the non-spore bearing organisms to a negligible degree. Single tank intermittent machines operated with a 60-second wash at 160° F and a 10-second rinse at 180° F. Multiple tank machines operated with a 40-second wash at 165° F. and a 20-second rinse at 180° F.

The Nation's Schools

Vol. 22, October 1938

*Rochester does it right. Illustrations.—p. 53.
*Building health through food. F. L. Hoag.—p. 54.
Cooking in quantity. B. M. Tansil.—p. 56.

NEW EQUIPMENT. Illustrations of the modern cafeteria equipment used in Rochester, New York, schools, graphically point out the efficiencies that have resulted in the operation of the school lunchroom.

SCHOOL LUNCH. Stresses the importance of the school lunch and the educational work to be done. Some interesting charts compare the better balanced diets in the school lunch of today to a whole day's meals as served in the Blue Coat School, London, in 1700.

The Personnel Journal

Vol. 17, October 1938

*The administration process. J. M. Landis.—p. 120.
*Unofficial boss. C. S. Slocombe.—p. 133.
Forty facts about workers. C. S. Slocombe.—p. 140.
Industrial relations in Great Britain. Extracts from report by President's Commission.—p. 144.

ADMINISTRATIVE AUTHORITY. Analyzes the developments in government and industry during the nineteenth century that have brought increasingly to the front the creation of an "administrative authority" to solve almost every major economic issue of the century.

FIND THE LEADERS. There is an unofficial boss in every group whose strong personality, decided views, or intense motivation very shortly determines the attitude of the other workers toward their work. A good foreman knows who the unofficial bosses are in his department and works through them either directly or indirectly to secure results.

Restaurant Management

Vol. 43, October 1938

*Around the clock with the efficient waitress.—p. 17.
*How to select and train waitresses.—p. 22.
*Before going on duty.—p. 23.
Table service for typical restaurants.—p. 24.
*Streamlining customer order.—p. 53.
*Three menus for fall profits. A. Easton.—p. 56.
Equipment news for October.—p. 91.

EFFICIENT WAITRESS. Thirty-six pictorial studies of the activities of an efficient waitress.

SELECT AND TRAIN WAITRESSES. Tabulation of qualities to guide in selecting a waitress and points to note in training.

ON DUTY. One of series of Good Service Charts showing correct waitress attire.

CUSTOMER ORDERS. Carder's Restaurant, Chicago, has increased turnover and secured

greater customer satisfaction through installation of an electrical duplicate-writing machine. The machine reproduces waitresses' orders written in the dining room for the kitchen, saves steps and eliminates "order calling".

FALL PROFITS. Successful operation of an eating establishment depends upon a sound financial policy based upon a fair percentage for food—35–40% in commercial cafeterias and restaurants, 40–50% in industrial cafeterias, clubs and tearooms, 50% and above in the exclusive clubs and hotels—and upon menus planned and executed to give customer satisfaction, including intelligent use of left-overs.

The Science Leaflet

Vol. 12, October 6, 1938

*Fluorine. Editorial.—p. 4.
*Chlorine. J. McSheehy.—p. 6.
*Chemistry in the swimming pool. G. E. Serries.—p. 9.
*Iodine and the anthrax peril in tanneries. J. Shaltz.—p. 15.
*Archimedes' principle. G. B. Welch.—p. 18

Vol. 12, October 1938

*Why study science? B. Braithwaite.—p. 35.

FLUORINE. Commercial uses of fluorine compounds include etching of glass, ink removing, mothproofing woolens and furs, neutralizing soap and mild alkalies used in washing process. Fluorine compounds in drinking water and in some dentrifices attack tooth enamel, resulting in tooth deterioration.

CHLORINE. Through extensive use in medicine, in water purification, as a poisonous gas and for explosives in major warfare, chlorine plays a major rôle in industry and chemical science advancement.

SWIMMING POOL. By filtration, sterilization of water, and use of copper sulphate for destroying plant growths, swimming pool water may be successfully purified by the more economical drainage method in lieu of continuous flow method.

IODINE AND ANTHRAX. As a result of development of a practical method for retrieving iodine occurring as a by-product in oil wells, hope of eradicating the danger of anthrax disease, peril of the tanning industry, is held probable by University of Pennsylvania research workers.

ARCHIMEDES' PRINCIPLE. The story and explanation of Archimedes' principle of the buoyancy of liquids and gases.

WHY SCIENCE. The study of science is essential for a general fundamental knowledge of factors composing present day civilization, as well as a requisite for good citizenship, having a practical and vocational value in art interpretation, in giving a deeper religious appreciation, and in promoting intellectual efficiency by logical and creative reasoning.

School Life

Vol. 24, October 1938

*Appreciating books. Editorial.—p. 8.
*Curriculum advances. Editorial.—p. 9.
*Adjustments to pupil needs. Editorial.—p. 12.
Developments in school housing and equipment. Editorial.—p. 14.
*Transportation of pupils. Editorial.—p. 16.
*Science in school and human life. W. Davis.—p. 19.
*Standards of pupil attainment. D. Segel.—p. 26.
*Is your school safe? W. H. Gaumnitz.—p. 27.

APPRECIATING BOOKS. Means of encouraging evaluation and appreciation of books in libraries include usable and attractive library quarters, informal conversation about books by teachers, librarians, and children, library story telling, book displays, books for each age group, book clubs, puppet shows, school papers, guided discussion, writing, and book reviews.

CURRICULUM ADVANCES. Use of the radio in the class room, visual aids, conservation education, health education, safety programs, social studies, and learning experiences in offices and industry are most noted among recent changes in public school curricula.

PUPIL NEEDS. Individual differences require different methods of approach and technique in teaching children. Child-guidance clinics offer service in the direction of attaining correct diagnosis and treatment of each child.

TRANSPORTATION. A 500% increase in the number of elementary and high school pupils transported from 1916–1936 with 800% increase in public funds spent brings to attention problems of adequate roads, suitable and efficient

conveyances, well conceived rules and regulations, school administration support and control.

SCIENCE IN SCHOOL AND LIFE. Every pupil should be shown the vistas of the sciences through a sound knowledge of health and hygiene; each should be exposed to certain abilities, facts, and ideas.

PUPIL ATTAINMENT. Better school organization is required as a result of gradual replacement of standards previously rigidly applied to children en masse, by standards taking into account individual student interests and abilities.

SCHOOL SAFE? Points to observe in constant checking of school plant and equipment as well as recommendations for prevention of explosions in schoolhouses, public buildings, and institutions.

NEWS NOTES

American Dietetic Association, Milwaukee Meeting. Among the more successful features of the recent meeting were the group dinners held on October 11. In reply to requests, the chairmen in charge of the several meetings sent in the following reports:

Teaching of Medical and Dental Students: Margaret McGovern, reporting for this group, of which Beula Becker Marble was chairman, states that 32 dietitians attended this meeting. Although the meeting was on common ground, the actual information brought by each member was unique and different in almost every case.

About one-third use a combination of laboratory and lecture; another third, demonstration and lecture; the rest, a straight lecture course. There was much enthusiasm for demonstrations using actual food, models and charts—even simple ones made on brown paper. Maximum student participation in planning diets, and close association with patients in the hospital clinic and out-patient department were considered extremely helpful.

Approximately half of the dietetic courses were given in conjunction with another course taught by doctors; the remainder were entirely separate courses. While the majority were held in hospitals or out-patient departments, some were given in medical or dental schools and one in a college nutrition laboratory. Practically any part of a hospital from the chapel to the nurses' sitting room had been adapted for the teaching of dietetics, most use being made of the diet kitchen, regular lecture rooms, and the dietitian's office.

One of the dietitians present had been teaching medical students for thirteen years, another for one year, while most of the group had taught for six or seven years. The amount of time devoted to nutrition teaching varied from four hours to eighteen weeks. Teaching rank in medical schools had been given to six dietitians who were present at this meeting.

Discussion was lively about the interest shown by medical and dental students in normal nutrition, using themselves as subjects; about the opportunities developed in the food clinic for teaching; and about various teaching devices and means of making nutrition information a vital and practical part of the doctor's armamentarium.

One of the suggestions was that a curriculum study be initiated. It is hoped that a meeting will be held in Los Angeles similar to the one in Milwaukee.

Social Work and Public Health: At this meeting, reported by Louise Majonnier and presided over by Adelaide Spohn of the Elizabeth McCormick Memorial Fund, Chicago, several members outlined the programs of the agencies they represented. Questions and discussion followed each report. Sophia Halsted opened the discussion with a description of the program of the Health Department of Detroit and outlined many of the ways in which a nutritionist can serve a community. The four-fold Detroit plan includes staff education, education of the clinic patient, publicity at large, and professional education.

Dorothy Hacker of the Visiting Nurse Association, Detroit, discussed ways in which a nutritionist may function in a private health agency by acting as a consultant to the nursing staff and by supervising therapeutic diets for private physicians.

Nutrition service in the Infant Welfare Society of Chicago, another private agency, was described by Alberta Childs. In this organization the emphasis is upon staff education. This is accomplished through conferences with the nurses; conferences with the nurse and parent either at the station or in the home; a play school which affords an opportunity for practical experience; case conferences; and nutrition study classes. In addition, the nutritionist supplies educational material to the staff.

Miss Fenge explained how a nutritionist functions for a private welfare agency. The Family Service of St. Paul, Minnesota, attempts to rehabilitate a selected group of families; whenever help is needed with food, nutrition or budget problems, the nutritionist is called in.

Imogene Cox described the interesting work she is doing with young women in connection with the Douglas Smith Fund in Chicago. Nutrition service is one of many health services available to these young women and although it has only been in effect a short time, it has already proved to be meeting a great need.

Bernice Happer has recently taken a position as community nutritionist, and is available to all agencies expressing a desire for her services in Cedar Rapids, Iowa. She outlined the way in which she is beginning her program.

In view of the large number and varying types of agencies now employing nutritionists, need of a special training course for this field has been indicated. Western Reserve University is just organizing such a course and Helen Hunscher of the Department of Nutrition described the plans.

It was gratifying to all interested in social work and public health to see such a large and enthusiastic group of workers. It confirms the belief that this is a growing field of service for people interested in community nutrition education.

Children's Hospitals: Nell Clausen reports eleven dietitians were present at the group dinner for dietitians in children's hospitals. Mrs. Eva Ylvisacker, Children's Hospital, Cincinnati, acted as chairman in the absence of Catherine Koch, Children's Convalescent Home, Cincinnati, who had been asked to sponsor the meeting.

Dr. George F. Kelly of Milwaukee talked to the group on "Clinical Care of Diabetic Children." A discussion followed, showing how greatly the dietitian's interest is centered on the treatment of diabetic patients. Nell Clausen described the "Diabetic Club" at Milwaukee Children's Hospital which keeps the children interested in maintaining their diets, builds up their morale and teaches them the care so essential to their welfare.

The problem of whether the milk laboratory should be under the supervision of the dietary department or the training school was also discussed. The fact that so few children's hospitals employ dietitians was deplored.

Plans for a group meeting next year were discussed and Nell Clausen was appointed to consult with members of the Executive Committee of the American Dietetic Association regarding the advisability of organizing as a special section.

School Lunchroom Directors. Mrs. Quindara Oliver Dodge, reporting for this group, states that two reports were presented: (1) the report of the Joint Committee on School Cafeterias of the A. D. A. and the A. H. E. A. (Mrs. Bryan); (2) the report of the outline, to be approved by the Executive Committee, for the training of administrative dietitians in fields other than the hospital (Katharine Harris). There was general informal discussion of these reports, questions as to methods of interesting parents in the importance of the school lunch, use of the radio for this purpose, work with parent-teacher groups, etc.

Several of the college teachers preparing school lunchroom managers were particularly interested in the personal qualifications of graduates which would enable them to make the most of the fifth year of training.

There was general discussion of ways and means of influencing food selection, improving appearance, lowering costs.

The problem of competition with the corner drugstore near the school was discussed in detail. Margaret Edwards presented an especially successful plan of competition as tried out in the food service department of the University of North Carolina.

Those attending the dinner conference were as follows: Estelle Marie Barker, 205 E. 24th St., New York City; Mary de Garmo Bryan, 40 E. 10th St., New York City; Pauline M. Clayton, University Hospital, Ann Arbor, Michigan; Edna B. Carl, Multnomah Hospital, Portland, Oregon; Julia Hoover, Good Housekeeping Institute, New York City; Laura Comstock, Medical Dept. Eastman Kodak Co., Rochester, New York; Winnona Cruise, Stout Institute, Menomonie, Wisconsin; Louise Sabye, Milwaukee-Downer College, Milwaukee; Elvira T. Smith, North Dakota Agricultural College, Fargo, N. D.; M. Faith McAuley, Chicago; Hazel P. Roach, 620 Mills Bldg., Washington, D. C.; Winning S. Pendergast, Board of Education, Detroit; Katharine W. Harris, College of Home Economics, Ithaca, New York; Margaret Edwards, Woman's College, University of North Carolina, Greensboro; Quindara Oliver Dodge, Women's Educational and Industrial Union, Boston.

College Food Service: Margaret Barnes, reporting for this group, of which Rosalie Godfrey was leader, states that thirty were present. Following the introduction of the guests, among whom was Annie L. Laird, a charter member of the Association, an informal round table discussion on residence hall food problems was directed by Miss Godfrey.

Among the subjects discussed were the following: student labor policies; dish breakage;

food education in dining halls; types of Sunday night suppers; refunds for meals missed; policies regarding guests; per capita cost and how figured; amounts paid for board; elimination of drug-store orders at night.

Rochester Day. Those whose schedule permitted a visit to Rochester and the Mayo Clinic following the five strenuous days of the Annual Meeting in Milwaukee, were well repaid. The Minnesota dietitians had arranged a day filled with interesting trips, talks and sight-seeing. The tour through the Mayo Clinic offered opportunity to see the official clinic filing rooms, the system used to convey records and reports from office to office, and the clinic registration and consultation rooms. Of particular interest was the Board of Governors Room which displayed diplomas, honorary degrees and titles bestowed upon members of the Mayo family.

The Mayo Clinic Library with its thousands of volumes and collection of current medical journals, its beautiful walls and beamed ceilings, provoked the admiration of the visitors.

In the Museum the dietitians were particularly interested in the display concerning basal metabolism, diabetic diets, and the historic portrayal of the story of diabetes.

Following the trip through the Mayo Clinic the visitors inspected the Rochester Diet Kitchen. This institution reflects excellent management both from the therapeutic and the administrative points of view. The metabolism therapy unit demonstrated nutrition teaching, well planned and executed for group and individual work, including a model set-up for the patient and the dietitian.

The trip to the Institute of Experimental Research of the Mayo Foundation gave a glimpse of the experimental work carried on. A luncheon given by the Kahler Corporation followed, with Mary A. Foley as hostess and Dr. E. H. Rynearson as toastmaster.

The visitors were greated at St. Mary's Hospital by Sister Mary Victor and her associates. Of special interest at St. Mary's was an educational exhibit of vitamin preparations for the assistance of the doctors and the dietitians. The visitors were greatly impressed by the unvarying excellence of the several departments and the ability of those in charge to describe their work.

At the Mayo Foundation House in the afternoon the visitors heard short talks by Dr. Wilder and Dr. Bargen. Dr. Wilder discussed certain phases of internal medicine in which diet is of particular significance and also discussed the use of vitamin concentrates in the use of corrective diets. Dr. Bargen discussed dietary treatment in intestinal disorders.

At the tea which closed the day's entertainment Mrs. Wilder and Mrs. Rynearson poured.

Publication of Papers Presented at the Annual Meeting, American Dietetic Association. The papers by Dr. Mary Swartz Rose and Dr. Lydia J. Roberts have been tentatively scheduled for the February 1939 issue of this JOURNAL. The papers of Drs. Carlson, Elvehjem and Murphy will appear in January, 1939. Other papers will appear in subsequent issues.

American Public Health Association. Dr. Marietta Eichelberger was the official representative of the American Dietetic Association at the session of the Association of Women in Public Health, held in connection with the recent annual meeting of the A. P. H. A.

Fourth Annual Conference of Food Service Directors, Rochester, New York, November 4–5, 1938. With a total registration of over 300 and a program filled with instructive papers and reports, this fourth annual conference was marked by great enthusiasm and unity of purpose. On the Thursday preceding the meetings, many of the delegates visited Cornell University at Ithaca. On Friday morning, with beautiful weather prevailing, the visitors toured the city of Rochester, visiting the many excellent school lunchrooms, the Strong Memorial Hospital, Mechanics Institute, the Women's Dormitory of the University of Rochester and the Eastman Kodak Company.

Delicious luncheons were served those making the trips, some in the school cafeterias and one, an artistic and delightful luncheon at Mechanics Institute. Greetings were extended the several groups of luncheon guests by the following: Elmer W. Snyder, principal, John Marshall High School; Roy L. Butterfield, principal, Benjamin Franklin High School; May D. Benedict, supervisor, Home Economics, Mechanics Institute.

On Friday evening the annual banquet taxed the capacity of the large dining hall at the Oak

Hill Country Club. The Rochester Dietetic Association were the hostesses with Constance C. Hart in charge and Laura Comstock presiding at the speakers' table. Greetings were extended by James M. Spinning, superintendent of schools, Rochester; Mary Pascoe Huddleson, editor, JOURNAL of the American Dietetic Association; Helen Judy Bond, president, American Home Economics Association and Etta H. Handy, president, Rochester Dietetic Association. The formal program of speakers at the morning and afternoon sessions and their subjects appeared in this JOURNAL for August-September, 1938.

On Saturday the annual luncheon was held at the Hotel Seneca with the Rochester Home Economics Association as hostesses and Jessie Winchell Tickell presiding. Greetings were extended to the luncheon guests by Harold E. Akerly, assistant superintendent of schools, Rochester, and Manie Lynde, president, Rochester Home Economics Association.

Other particularly noteworthy features of this conference were the well arranged and extensive educational exhibits and the excellent showing of the eighteen commercial exhibits, many of which were devoted to the display of equipment.

School Lunchroom Managers and Directors Sectional Meeting. Under the direction of Mary Hemmersbaugh of Cleveland, the following program was held in the Public Auditorium of Cleveland on October 28: "Practical Nutrition through an Integrated Program", Lucille Myers, Alexander Hamilton Junior High School, Cleveland; "Purchasing for the School Lunchroom", Edward F. Smircina, purchasing agent, Cleveland Board of Education; "Good Equipment Necessary for Efficient Lunchroom Operation", Owen T. Webber, Counsel on Public Feeding, New York City.

Training Technologists for Food Industries. *Food Industries* for October 1938 states that the University of Washington has introduced a four-year course in Food Technology which will provide training for students who intend to enter the field of food production as control or research laboratory workers. The curriculum in this course is administered by a committee from the departments of bacteriology, chemistry and home economics.

The same issue reports a conference on food preservation held at the University of Tennessee, Knoxville, October 20–21. Among the papers of particular interest to dietitians were the following: "Effects of Freezing on the Vitamin Content of Vegetables", Gerald A. Fitzgerald, chief chemist, Birds Eye Laboratories; "Quick Freezing Fruits and Berries", R. B. Taylor, University of Tennessee.

California Dietetic Association. According to information received from dietitians who attended the Milwaukee meeting, members of the A. D. A. who are interested in combining a refresher course covering a survey of recent advances in nutrition or the problems of the administrative dietitian, along with the trip to the 1939 A. D. A. meeting, may write to Dr. Agnes Fay Morgan, University of California, Berkeley, for further information.

Those who are interested in postgraduate work in administration may write to Charlotte Sloan, The Stanford University Hospital, San Francisco.

The Scripps Metabolic Clinic, La Jolla, California, offers a three months' postgraduate course on diet therapy for dietitians.

Kansas City Dietetic Association held the first meeting of the year on October 18 at the home of Mrs. Mildred Bowersock. A covered dish supper was followed by a short business meeting and a social evening. Officers for the coming year were elected as follows: Mary Merle Buckles, president; Mildred Young, vice-president; Ruth Bailey, secretary; Pauline Kegereis, treasurer; and Mrs. Belle Rathbun, corresponding secretary.

Maryland Dietetic Association. Assignments for the radio broadcasts on "Nutrition" for this year are now being made by Mrs. Alice Lambert, chairman of the Community Education Section.

The Diet Therapy Committee met at the Johns Hopkins Hospital October 25 to plan their program for the year. Betty Olson is chairman.

Eugenia Eley has accepted the position as dietitian at the Washington County Hospital, Hagerstown.

Catherine M. Leamy of Gardner, Massachusetts, has accepted the position of state nutritionist with the Maryland State Health Department.

The following students entered training at

the Johns Hopkins Hospital on October 1: Jean Beall, James Millikin University; Lucille Thomas, Hood College; Linnea Anderson, State Teachers College, Framingham; Mary Dane Cory, University of Illinois; Barbara Glascock, Kings College, University of London; Louise Healy, St. Mary-of-the-Woods College; Ruth Starke, Michigan State College; Lenore Wells, Purdue University; Lucille Zilmer, University of Wisconsin; and Caryl De Woody, University of Texas.

Mrs. R. W. Hambleton has been appointed pediatric dietitian, a new position recently created in the Harriet Lane Home of the Johns Hopkins Hospital.

Mary Stansel, former assistant administrative dietitian at Johns Hopkins Hospital, has accepted a position as assistant dietitian at Vassar College, Poughkeepsie, New York.

Nancy Hedrick, who completed the postgraduate course at Johns Hopkins Hospital in October 1938, has joined the staff as ward dietitian.

Massachusetts Dietetic Association. At the October meeting of the association, the subject "Some Current Aspects of Purchasing" was discussed by Mr. Joseph Sawyer of the Merchandise Division of R. H. White Company, Boston.

The association was officially represented at a recent luncheon at the Hotel Statler in Boston at which Mr. S. B. Standbro, manager of the hotel, read a paper on "Women in Hotel Kitchens". The concluding paragraph of this address is of especial interest to dietitians: "Eating habits are changing from year to year, almost from month to month, and the employment of competent college-trained women in Statler kitchens is one of the means taken to keep abreast and perhaps anticipate a little the food demands of the American people. These women are the first in hotel history to hold such important posts and their work is meeting with such success that the Statler organization feels their employment to be a great forward step". Alice M. Fenno is manager of the Cafe Rouge, English Lunch Room and Sandwich Shop, and supervisor of food preparation in the Pantry Department of the Boston Hotel Statler.

Lucretia Battles, formerly with the United Fruit Company in Boston, is now in the Commons Department of the University of Washington.

The following are enrolled as administrative student dietitians in the course at the Women's Educational and Industrial Union: Ruth Benwell, University of Colorado; Mary Lou Black, Kansas State College; Marian E. Chandler, Iowa State College; Marion Congdon, Rhode Island State College; Betty Crandall, University of Washington; Janice R. Daugherty, University of Nebraska; Mary E. Latham, Cornell University, and Meriel L. Reed, Simmons College.

Charlotte Raymond recently led a discussion on the subject "Aspects to Consider in Budget Case Work" at a meeting of the Social Welfare and Public Health Section of the New England Home Economics Association. Andromache Tsangas of the Community Health Association is the newly elected chairman of this section.

The engagement of Mary Robertson, Massachusetts Memorial Hospitals, to Mr. Howard M. Buffington, has recently been announced.

Vera Marquis, Baker Memorial Hospital, has been appointed dietitian at the Massachusetts Eye and Ear Infirmary. Eunice Cox, for five years dietitian at this Infirmary, has resigned to accept a position at the Mary Hitchcock Hospital in Hanover, N. H.

Lois Hammett, a recent graduate of Beth Israel Hospital, has joined the Massachusetts General Hospital staff.

Ada Johns, a graduate of the 1937 student course at the Massachusetts General Hospital, who was formerly at the Hahnemann Hospital in Philadelphia, is now at the Stillman Infirmary, Harvard College.

Frances Horgan, a graduate of Massachusetts State College and the Boston Dispensary Food Clinic course, has recently been appointed as nutrition worker in the Community Health Association, Boston.

The Boston Dispensary Food Clinic announces that the five body system pictures on the leaflet "Feed Your Baby to Protect your Health" have been enlarged to the size of thirteen by twenty inches and may be purchased for fifty cents a set. A new set of wax models with glass covers has been added to the Food Clinic equipment.

New Jersey Dietetic Association. The sixth annual meeting was held at the New Jersey College for Women, New Brunswick, on November 17. The morning session opened with greetings around the coffee table, with the institution

administration seniors of the Home Economics Department as hostesses. The annual business meeting followed with Sophia Morris, president, presiding. Reports of section activities were presented by the following: "Administration," Winifred Cushing, chairman; "Diet Therapy", Beatrice Goldstein, chairman; "Professional Education", Elizabeth Rupert, chairman; and "Community Education", M. Irma Donnelly, chairman. Mary A. Neill then reported on the Milwaukee meeting of the American Dietetic Association.

Other speakers and their subjects during the morning session were as follows: James F. Best, purchasing agent, New York Hospital, New York, "Standardized Buying Procedures for the Institutional Director"; Mary Pascoe Huddleson, editor, JOURNAL of The American Dietetic Association, "The Dietetic Profession—Its Beginnings and Future".

At the luncheon held at Cooper Hall, greetings were extended by Margaret T. Corwin, dean, New Jersey College for Women, and Helen W. Hazen, head, Home Economics Department. The speaker at the afternoon session was Dr. James Waddell, director of the Biological Laboratories of the E. I. duPont de Nemours and Company, his subject, "Résumé of Recent Research on Vitamin Chemistry and Requirements". A trip followed to the new Squibb Institute for Medical Research in New Brunswick.

Greater New York Dietetic Association. At the dinner meeting on October 3, Mrs. Chase Going Woodhouse discussed "Dietetics—an Uncrowded Profession". Mrs. Woodhouse gave four definite influences by which the economic trend in women's occupations has been estimated. The first of these she termed "population changes." In 1920–30 the population of America increased 15 per cent, and when the figures for 1930–1940 are determined this population increase will be only 7½ per cent. In other words, according to the forecast of statisticians, America is reaching a stationary position of increase in population. Except for the states of Vermont and New York, women are increasing faster and flocking to the cities in greater numbers than are men. Where once there were approximately 102 men to 100 women in the rural sections, there are now 113 men to only 100 women. There is also an increasing proportion of married women working. In 37 states 37 per cent of the married women are working. Likewise there is an increase in the age of women employed; one-fifth are at least 45 years of age.

The second influence is that of the government. Federal, state and local governments are emphasizing public health, social service, and so on, and women are finding their places in such work. The third influence is that of consumer education. The home economists were the first to recognize this factor and it has been quickly recognized in the advertising fields. The fourth trend is the increasing tendency of women to go into service occupations. Increasingly efficient machinery has released personnel. The women have wisely chosen the service occupations, and have suffered less than the men in unemployment due in part to this.

Mrs. Woodhouse forecasts that dietitians will benefit ultimately through these economic trends and influences. Reports throughout the country show that more and more hospitals are employing dietitians. In addition, commercial firms are realizing the importance of dietitians in their field. The fine standards outlined by the profession, the geographical scope and the excellent central organization which characterizes the American Dietetic Association, have a marked influence upon the placement of dietitians in the field of women's occupations.

On October 31 the Professional Education Section held a special meeting at New York University under the chairmanship of Clyde B. Schuman. The speakers were Lenna F. Cooper, Emma L. Feeney and Nelda Ross.

Oklahoma Dietetic Association. The Executive Committee met on September 4 and voted to hold the 1939 annual meeting at Tulsa, April 21–22.

For the coming year it has been planned to assign the responsibility for the four issues of *The Dietitian*, the official bulletin of the state, to four state regional groups under the direction of Harriet Sedgwick, northeastern section; Dr. Daisy I. Purdy, Stillwater; Dr. Helen Burton, Norman; and Margaret Durrett, Oklahoma City.

The fall issue of the state publication contains the following articles: "Consultant Dietetics", Murl Campbell Roby; "The Hypoglycemic Shock Treatment", and "Nicotinic Acid in the

Treatment of Pellagra", Dietary Department, Eastern Oklahoma Hospital.

The Dietary Department of the Oklahoma State University Hospitals graduated the following students on August 28: Mrs. Muriel Nelson, Oklahoma Agriculture and Mechanical College; Josephine McCulley, University of Nebraska; Alvina Beran, Texas College; Mabel Walker, Oklahoma Agriculture and Mechanical College; and Mrs. Mary Stubbs, University of Oklahoma.

For the coming year the class has been increased to eight students as follows: Mary Cumbie, University of Texas; Dorothy Baker, Iowa State College; Aileen Christie, Colorado State College; Elizabeth Leffardink, University of Nebraska; Helen Smith, Texas State College for Women; Mary Frances Self, Texas College; Novelle Tucker, Oklahoma Agriculture and Mechanical College; and Wilma Young, University of Tennessee.

Marie Doran has taken a position at the Soldier's Tuberculosis Sanitarium at Sulphur. Miss Doran is a graduate of Harper Hospital, Detroit.

Philadelphia Dietetic Association. The association met on October 25 with Frederick H. Lund, Ph.D., professor of psychology, Temple University, speaking on "Emotions: Their Development and Control." Representatives from the League of Nursing Education and American Association of Medical Social Workers, Middle Atlantic District, were guests.

Catherine Roess, therapeutic dietitian at Jefferson Hospital, recently participated in round table conferences on nephritis and cancer at the annual meeting of the State Medical Society of Pennsylvania.

Anna DePlanter Bowes represented the American Dietetic Association at the Conference of the National Committee for Better Care of Mothers and Babies which was held in Washington early in October. Her report was presented to the Executive Committee at the A. D. A. convention in Milwaukee.

Grace Godfrey, dean of home economics, Drexel Institute of Technology, attended the American Home Economics Association meeting at Pittsburgh in June. Lila G. Hainer, assistant professor of home economics, Drexel Institute of Technology, presided at the Institutional Administration meeting. Both gave radio talks.

Almeda M. Reese, a charter member of the association, has resigned her position at Methodist Hospital and is at 1308 Lake Road, Avon Lake, Ohio.

A quarterly news letter of the association is being edited by the Publicity Committee to inform members with regard to current news in the dietetic and nutrition field in Philadelphia.

The Special Diet Committee, with Frances L. Swenson, therapeutic dietitian, Mount Sinai Hospital, as chairman, continues to compute average prices of foods in the city and calculate the cost of low cost special diets and circularize these to those interested.

Frances L. Hoag gave a talk at Scranton on September 17 on the work of the Community Education Section of the Pennsylvania State Dietetic Association.

Pittsburgh Dietetic Association held its first fall meeting on October 4. The new officers elected for 1938–1939 are as follows: president, Catherine Fry, Allegheny General Hospital; vice-president, Dr. Pauline Sanders, Indiana State Teachers College; secretary, Audrey K. Oakley, Pittsburgh District Dairy Council; treasurer, Gladys Murray, Valley Hospital, Sewickley, Pennsylvania.

Mrs. Marion M. Peirce, nutritionist, Pittsburgh District Dairy Council, was the speaker for the evening. Mrs. Peirce spoke on the activities and accomplishments of the Dairy Council. She also offered the new food share project to those who felt that it would be an aid in teaching student nurses.

The following students have begun their training at the Shadyside Hospital: Constance Weiss, Hood College, Maryland; Mary Sartore, University of Georgia; Elizabeth Costello, Marywood College, Scranton.

Western Pennsylvania Hospital has received the following students: Doris Hartson, Keuka College, New York; Victoria Brust, Ohio University; Irene Yakulis, Seton Hill College, Greensburg, Pennsylvania; Katherine Ulrich, University of Iowa; Lois Pate, Hood College, Maryland; and Josephine Marvin, Mt. Mercy College, Pittsburgh.

Rhode Island Dietetic Association. Members of the association have been actively engaged in relief work following the September hurricane. Florence Case, nutritionist for the Family Wel-

fare, Providence, was loaned to the Red Cross for a month; Ruth Cummings, cafeteria manager of public schools, Providence, has been engaged in feeding the WPA night force in rehabilitation areas; and the Rhode Island State College, Kingston, has been feeding all WPA workers in their section.

Texas Dietetic Association. The executive committee of the association met with the president, Selma Streit, in Austin on October 29, to hear the official report on the American Dietetic Association meeting held in Milwaukee and to make plans for the coming year. Ten members were present.

The state convention will be held in Austin in March 1939. Rosalie Godfrey of the University of Texas is program chairman. Austin is a charming place in the spring of the year, so a full attendance at the meeting is anticipated. Miss Streit served tea following the meeting.

The November issue of the *Bulletin* carries articles by Ruby Coury Patterson, R. B. Newton, Frances Low, Dorothy Russell Goetzke, Erna Ritter, and Frances Ross Lawler, and a complete report of the Milwaukee meeting of the American Dietetic Association.

Helen Mims was married on September 21 to Mr. William Douglas Sprague.

The first monthly meeting of the South Texas Dietetic Association was a dinner meeting at the Memorial Hospital with Mary Smith, Blake Patrick and Patricia Harden as hostesses. Angeline Phillips of the University Hospital was the guest of the association for this meeting. The following officers were elected for the coming year: president, Mamie Ruth Harris; vice-president, Ella Schwartz; secretary-treasurer, Anna Margaret Lutz; member at large, Clara Mathes.

Sara Baumgardner White of the City School Lunch System is a new member of the South Texas group.

Tony Bracher, formerly of Williamsburg, Virginia, is back in Houston as dietitian of the Houston Country Club.

Mary E. Smith has been appointed on the membership committee of the American Dietetic Association.

Florence Pierson, formerly dietitian at Station Hospital, Fort Sam Houston, has recently accepted a position at a government hospital, Long Island, New York.

Esther Christianson, for two years assistant business director of Women's Building, University of Texas, is now business manager of Kirby Hall, the Methodist dormitory for girls.

Mary Stockton, who finished her work at the Women's Educational and Industrial Union of Boston under the direction of Quindara Oliver Dodge, has accepted a position at Carother's Dormitory, University of Texas, as an assistant to Maidie Brookshire.

Frances Kernodle, formerly dietitian at the Presbyterian Hospital, New York City, is now resident director of Women's Building.

Selma Streit and Medie Kyle, Scottish Rite Dormitory, attended the opening session of the American Hospital Association. Miss Streit read a paper before the dietetic section on "Selection and Maintenance of Institutional Food Equipment".

The addition of a home economics institutional laboratory to the physical plant of the University of Texas was assured with the announcement that the Public Works Administration has granted $9000 to apply on the construction cost. The laboratory will be used in training home economics students majoring in institutional management.

Margaret Ball, formerly dietitian at Baylor Hospital, has taken a position as dietitian at Lowry Hall, Texas State College for Women. Louise Nichols, assistant dietitian at Methodist Hospital, succeeded her at Baylor Hospital.

Margaret Crawford, formerly at Texas State College for Women, has accepted the position as dietitian at Baylor University.

New dietitians in the Dallas School lunchrooms are Lucille Torrance, Jo Beth Arledge, Virginia Bess Jackson and Barbara Burnett.

Martha Van Ness from the University of Texas, is now assistant dietitian at Methodist Hospital, Dallas.

Commercial Exhibits, American Dietetic Association, Milwaukee, October 10–14, 1938. The annual exhibitors' luncheon, at which those in charge of the various exhibits are guests of the members of the A. D. A., was again a well attended and interesting feature of the annual meeting. With Bertha Nettleton of *General Foods Sales Company, Inc.*, New York City, presiding, and Dr. James Webber Linn, professor of English literature at the University of Chicago, speaking, this luncheon meeting from

beginning to end was most enjoyable. For the benefit of those members unable to attend the Milwaukee meeting a brief account follows of the salient features of each exhibit.

The *Aluminum Cooking Utensil Company*, New Kensington, Pa. showed several new utensils of interest to the institution manager. Margaret Mitchell, in charge of the booth, was showing her new book on institution equipment, helpful for student class work.

American Can Company, New York City, through its home economics department under the direction of Isabel Young, offered much of interest to the dietitian and teacher. Interesting circulars are available. "A Word About Tin Cans" explains the manufacturing, and a set of tins, for demonstration purposes, shows the contents of a can in pints and cups including the trade size designation. "The Canned Food Handbook" contains authoritative answers to 37 queries on canned foods. An excellent collection of charts and abstracts of published research related to canned products are also available. These and the bound volume entitled "Nutritive Aspects of Canned Foods" are authoritative and excellent references on the subject, available to professional people.

The exhibit of the *Battle Creek Food Company*, Battle Creek, Michigan, was noteworthy for its display of products made from soy beans and its literature descriptive of these products, of particular interest in allergy diets, as well as a complete display of other dietary products, such as the "new savory yeast" an appetizing form of the vitamin B complex, and an acidophilus soy bean milk.

Elsie Stark, director of home economics for the *Best Foods, Inc.*, New York City, was showing reprints of assays of "New Nucoa", with a vitamin A content of 7500 units per pound or the equivalent of 500 units per ounce. This product has a proved high rating for digestibility and is suitable for a spread, a shortening, seasoning, pan frying and as a base for sauces.

The Borden Company, New York City, displayed the "rotolactor", a replica of an exhibit to be shown at the New York World's Fair, showing the transit of milk from cow to customer. Among their new products is "Biolac" a new milk product for infants designed to approach as far as possible the qualities of human milk. The booth displayed an impressive showing of literature, all of which was of interest to the dietitian and the teacher.

Those in charge of the *California Food Research Institute*, San Francisco, displayed folders and other descriptive literature and discussed their work in developing recipes and new ways of using products. Their interest is especially concerned with dried fruit, ripe olives, the "Calavo" and whole fruit nectars. This promotional educational work is directed by graduate home economists and dietitians.

The *Carnation Milk Company*, Oconomowoc, Wisconsin, told the story of milk from the cow to the can by means of a graphic display. Here the new "Carnation" cook book was also on display, and a means of making a delicious ice-cold chocolate milk was demonstrated.

Chicago Dietetic Supply House displayed a line of "Juice Pak" and "Water Pak" fruit and fruit juices, and a helpful allergy booklet available to those interested.

Citrus Concentrates, Inc., Dunedin, Florida, believe that they have the answer to the dietitian's beverage problem, for their new exclusive process permits the delivery to your door of a concentrated juice from tree ripened fruit with all its natural delicious flavor and food value. Orange and grapefruit juices are both available. For convenience, economy, ease of preparation, and conservation of storage space, these concentrates are a great boon.

Colson Corporation, Elyria, Ohio, were showing the famous all stainless steel, "Ideal" food conveyors and other hospital equipment and distributing a brochure descriptive of this equipment.

F. A. Davis Co., Philadelphia, displayed Katherine Mitchell's text book *Food in Health and Disease* for nurses, Taber's *Digest of Medical Terms*, and Graves and Taber's *Dictionary of Food*.

The R. B. Davis Co., Hoboken, New Jersey, had new data available on "Cocomalt." This product now contains 5 mg. of iron per ounce and a greater amount of vitamin D. It is readily soluble in cold milk. Descriptive literature, including a new booklet helpful in the feeding of children, were available.

Edison General Electric Appliance Co., Chicago, showed the new custom top range, "Brawny Lad", for the tea room, diet kitchen or small restaurant. This range accommodates 4 "Hi-Speed Calrod" surface units, 2 round sur-

face units on the left side, one 12 x 24 in. griddle on the right side, and one 24 x 24 in. griddle. Protected sealed terminals and a removable drip pan were also part of the equipment. Other features were the automatic electric fry kettle and the waterless hot food storage receptacles. Especially noteworthy was their new low priced diet kitchen electric range.

Foley Mfg. Co., Minneapolis, exhibited a Foley food mill, mincer, can opener and blending fork. The food mill mashes, rices and strains all cooked food. The mincer grinds all raw food and minces parsley, onions, etc. It also grates carrots, potatoes, cheese and fresh cocoanut. Novel suction cups hold this mincer firmly to the table. The excellent can opener lifts can from boiling water, opens it and raises cover slightly so that contents can be poured from can without touching the heated tin. The blending fork cuts in shortening for pies, biscuits, cakes, cookies, and mixes them from start to finish.

J. B. Ford Sales Co., Wyandotte, Michigan, with its famous Indian symbol, displayed several excellent cleaners designed to meet a variety of needs.

Ina B. Lindman, director of home economics for the *Fruit Dispatch Co.*, New York City, had several new offerings to make to the dietitians at this meeting, among them a brand new set of 35 quantity recipe 4 x 6″ cards just off the press and properly bright yellow in color, all of which were particularly selected for dietitians. These recipes were carefully chosen and triple tested in Miss Lindman's kitchen. The reverse of the card gives the recipe in small quantity proportions. Two boxes of bananas were on display showing the latest development in distribution by the fruit jobber to institutions. The boxes showed how the bananas were packed 40 lbs. to the box, all carefully placed to prevent bruising and to facilitate handling and storing.

Bertha Nettleton of the *General Foods Sales Co.*, New York City, called attention to the new 20-portion tin box of "Dezerta". Others of the many famous General Foods products were on display including the new 4 oz. package of "Sanka" coffee, packed 36 cans to a case, and particularly suitable for special orders in the hospital. Additional features were the "Birds Eye" line of frosted fruits to which the same high standards and laboratory control, characteristic of all the General Foods products, are applied.

Lillian Storms of the *Gerber Products Co.*, Fremont, Michigan, showed the complete line of these famous products for infant feeding, including descriptive literature for inclusion under the subject of infant nutrition in the student's handbook, a handbook for teachers on the same subject and recipes for special diets. Dr. Storms hopes soon to get out a revised edition of her *Babies' Vegetable and Cereal* booklet.

The *Hawaiian Pineapple Co. Ltd.*, San Francisco, displayed "Dole Gems", cut with the grain in succulent, good sized chunks so that you bite with the grain. These are made from the tenderest, juiciest part of the whole fruit.

H. J. Heinz Co., Pittsburgh, offered copies of soft diet recipes and the 6th edition of their helpful nutrition charts. New products, Heinz strained pears and pineapple, were also on display, along with many others of the justly famed offerings of this company.

Hilker & Bletsch Company, Cincinnati. This firm's new "Vitamin B_1 Wafer" made its debut at the Milwaukee meeting. Each of these wafers contain 100 I.U. of vitamin B_1 in a pleasing and practical form. Along with their now well known "V-C-B," vitamin C beverage base, this company showed a number of products of interest to the institution food manager.

Horlick's Malted Milk Corp., Racine, Wisconsin, displayed malted milk lunch tablets, natural and chocolate flavor, and powdered malted milk.

The *International Association of Ice Cream Manufacturers*, Washington, D. C., were distributing copies of their monthly publication, *Ice Cream Currents*, and demonstrating modern methods of making ice cream.

Irradiated Evaporated Milk Institute, Chicago, showed a manufacturing plant and the various operations in the production of evaporated milk, heating, evaporation, irradiation and homogenization. Also available were units of study on milk, of interest to every teacher.

The *Journal of Home Economics*, Washington, D. C. displayed circulars descriptive of the association, its organization, purpose and work, including association publications on a number of topics related to the problems of home economists.

Mary Barber of the *Kellogg Company*, Battle Creek, Michigan, was showing a loose leaf card file entitled "Cerealia", the story of corn, including recipes and special purposes for

which corn flakes may be used. She also displayed a set of rules for the standardization of recipes and many other pieces of descriptive literature of interest to dietitians, for which this company is justly famous.

Diet therapy literature, descriptive of the dietary treatment of the diabetic and for use in weight control, glycine therapy, liquid and soft diets, colitis, and gastric ulcer treatment, were available at the booth of the *Knox Gelatine Co. Inc.*, Johnstown, N. Y. This firm also has quantity recipes available for the use of Knox products.

Cheese in a "Sealtest" wrapper was a feature of the *Kraft Cheese Company's* exhibit. Other noteworthy features were the 2 and 5 lb. sizes in which cheese is now available. Mary Dahnke will be happy to add your name to her "Cuisine Service" list.

Libby, McNeill and Libby, Chicago, displayed three new additions to their family of homogenized baby foods; strained carrots, strained spinach, and peas.

J. B. Lippincott Co., Philadelphia, displayed Cooper, Barber and Mitchell's new edition of *Nutrition in Health and Disease*, Barborka's *Treatment by Diet*, and their new food book *Salads and Herbs*. They were also distributing their new crossword dietetics puzzle.

The Macmillan Co., New York City, displayed Proudfit's latest text book for nurses, Roses' *Foundation of Nutrition* and called attention to new editions of McCollum's and Sherman's text books soon to appear.

Mary Pearl of the *Maltex Company, Inc.*, Burlington, Vt., who featured the tasty cereal "Maltex", also displayed a number of charts of great assistance in the teaching of good health food habits in the grade school, including a chart for measuring the height of children. Many of her recipes suitable for card filing were also available.

Mayer China Company, Beaver Falls, Pennsylvania, had a handsome display of colorful china noted for its durability. They control the basic patent for "fade out" and "brush out" decoration, most appropriate in a modern setting. They also displayed a handsome booklet entitled "From the Dawn of History" covering the historical aspects and modern manufacture of china.

National Biscuit Company, New York City, had a score sheet listing the most popular types of crackers. This score sheet is accepted by government institutions and used in qualifying all crackers purchased. Helen S. Kintzing, director of the Home Economics Department, states that this sheet is available to all dietitians.

National Canners Association, Washington, D. C., exhibited its excellent educational literature, the most recent of which, "Canned Food Recipes for Fifty", is reviewed in this JOURNAL.

National Dairy Council, Chicago, featured the use of acidified fresh milk in infant feeding. Educational material is available from the council, as well as infant feeding diet schedules using an acidified fresh milk.

National Enameling and Stamping Company, Milwaukee, showed a number of roasters equipped with stainless steel insulated covers and thermostatic control.

National Live Stock and Meat Board, Chicago, had a health army on parade in the form of an animated food value chart. A day's dietary for a normal adult was also shown in wax models. Descriptive literature is available from the board.

Alida F. Pattee, Mount Vernon, N. Y., was showing her new 21st edition of *Pattee's Dietetics*, which continues to keep up to the high standard attained in previous issues.

Pet Milk Company, St. Louis, displayed a miniature working model of an evaporated milk plant and will be glad to send descriptive literature and helpful recipes to those applying.

O. R. Pieper Company, Milwaukee, are wholesale food distributors for Wisconsin, Michigan, Indiana, and parts of Ohio, Illinois, Iowa and Minnesota. Among the excellent products shown were 4 lb. cans of salmon, tuna and shrimp, hand packed, and of uniform quality.

Quaker Oats Company were showing cards suitable for filing, descriptive of the manufacture and composition of their many excellent food products. *Nutrition*, an interesting monthly publication giving late news in the field of nutrition, is available to those interested.

Ralston Purina Company, St. Louis, were showing their line of delicious cereal products. This firm offers helpful descriptive literature on allergy and reducing diets to those interested.

Will Ross, Inc., Milwaukee, were showing some of their hospital supplies of particular interest to the manager of the dietary department. This firm has the most complete list of hospital supplies in the United States. Their

catalog is sent to every hospital of over 25 beds in this country.

Ad. Seidel and Son, Chicago, displayed their large line of gelatine products, marmalades, a new date butter, and a fortified fruit punch.

John Sexton and Company, Chicago, were proudly displaying a new product, peeled French prunes. This company, long noted for the high standards of their canned fruits, vegetables, jams, preserves and pickles, arranged a popular sampling place at the meeting.

Standard Brands, Inc., New York City, displayed their new flavor in puddings, butterscotch with an arrowroot base. Readers of the JOURNAL are urged to write in for recent publications of interest to the dietitian.

A delightful aroma of coffee led to the booth of the *Stewart and Ashby Coffee Company*, Chicago. This firm prides itself on the high standard of its coffee and teas. Interesting brochures on the story of coffee and tea, including copies of the first known coffee advertisement, are available from this firm.

Vitex Laboratories, Harrison, New Jersey, had available to professional persons a digest of facts and opinions on vitamin D milk brought up to date, 1938. They also distribute vitamin charts.

The Wander Company, Chicago, were offering restoring drinks of delicious "Ovaltine" to the visitors, as well as reprints of studies on gastric starch digestion, gastric physiology, and the curd tension of milk.

Wisconsin Alumni Research Foundation, Madison, showed a miniature irradiator and featured the process used in treating secondary anemia. Excellent descriptive literature is available on application to this firm, in the form of lesson plans, charts, and other material helpful to the teacher in the grade and high schools, and in the college.

And last, but not least, was the exhibit of the *Florida Citrus Products*, whose entry in the list of exhibits was received too late for publication in the official program. This organization is designed to promote the use of Florida's delicious citrus fruit products.

INDEX TO VOLUME 14

The following abbreviations indicate in which section the material indexed appears: ab., abstract under current literature; a.r., annual reports; c.c., current comment; ed., editorial. A star (*) indicates an original article appearing in this JOURNAL. Author index, which appears following subject index, includes only the names of authors of original material appearing in this JOURNAL in full or abstracted under the editorial section, and names of authors of books reviewed.

SUBJECT INDEX

Accidents, ab. 143, 372
Accounting, cost, system, c.c.* 127
  lunchroom, ab. 292
Addison's disease (*see* potassium)
  treatment, advances in, ed.* 191, ab. 727
Administration, section, a.r. 782
Adrenal insufficiency, ab. 666
Adult, groups, teaching, in clinic,* 517
Advertising, censorship, ab. 732
Air-conditioning, ab. 214, 289, 369, 825
Airways, dietitian in, c.c.* 197, ab. 568
Alanine, relation, to growth, ab. 365
Alcohol, effect, on metabolism, ab. 366
Alcoholism, chronic, neuritis in, ab. 52
Alkali, reserve, rate of change, ab. 54
Alkaline, tides, ab. 457
Allergy, alimentary disturbances due to, ab. 207
  booklet, revision of, a.r. 788
  in childhood,* 629, ab. 823
  diet in, ab. 823
  diets, study of recipes in, c.c.* 646
  food, in ulcerative colitis,* 177
  milk, evaporated, in, ab. 828
  nasal, ab. 668
  reactions, ab. 371
  sensitization to pollen, ab. 456
  sodium thiosulphate in, ab. 557
  symptoms of, ab. 207
Amino acids, essential, ab. 137
  metabolism, ab. 660
Anacidity, glucose tolerance in, ab. 363
Anemia, of children, ab. 211
  cobalt and milk in, ab. 660
  copper in, ab. 55
  and gastro-intestinal tract, ab. 658
  hemorrhagic, effect, blood, copper and iron, ab. 284
  hypochromic, absorption iron in, ab. 364
  hypochromic, chronic, in women, ab. 455
  idiopathic, hypochromic, ab. 51
  macrocytic, in stomach cancer, ab. 207
  nutritional, meat in, ab. 286
  in puppies, ab. 664
Anemia, pernicious, iron retention in, ab. 455
  peptic ulcer in, ab. 51
  weight changes in, ab. 285
Animal, diseases, deficiency, related to pellagra,* 157
Animal, products, as sources protein, calcium and phosphorus,* 256
Annual meeting, twentieth, ed.* 40
Annual reports, 1937–1938, and proceedings, Milwaukee meeting, 773
Antineuritics, (*see* vitamin B_1)
Appetite, hunger and thirst, ab. 723
  and weight building tonic, ab. 728
Apple, with milk formulas, ab. 723
Apples, varieties, uses, ab. 461
  vitamin C losses in, ab. 209
Application, forms, ab. 142
Aptitudes, testing, ab. 142
Arginine, essential nature, ab. 559
Arthritis, rheumatoid, treatment, ab. 728
  vitamin C in, ab. 557
Ascorbic acid, urinary excretion, ab. 58
Association, American Dietetic (*see* annual reports)
  approved training courses, 792
  organization chart, 775
Auditor, a.r. 777
Avitaminosis, sebacious gland atrophy in, ab. 210

Bacteria, in air, ab. 207
  intestinal, infants, factors influencing, ed.* 270
Bake shop, restaurant, ab. 215
Beans, proteins in, ab. 286
Beriberi, pathology of, ab. 367
Bibliography, a.r. 787
Bile, chemistry of, ab. 656
  and hemoglobin, ab. 562
  output, effect of foods on, ab. 556
Biliary, tract, disease, ab. 727
Blacktongue (*see* pellagra) experimental, ab. 664
  p-p factor, ab. 212, 365

Blacktongue-producing diets, deficiency of, ab. 726
pyridine compounds, and, ab. 660
Blood, copper and iron, factors affecting, ab. 134, 284
erythrocytes, leucocytes, hemoglobin, ab. 366
lipids, domestic fowl, ab. 285
regeneration, factors affecting, ab. 454
Bookkeeping, ab. 567
Book reviews, 47, 130, 202, 282, 360, 453, 552, 652, 721, 817
Apples, Nutritive value of, 283
Babies, Modern ways with, 130
Biochemistry, Perspectives in, 652
Budget, Chicago standard for dependent families, 453
Cancer, and diet, 202
Catering, Scientific, for institutions, 553
Chemistry, Essentials of, with laboratory manual, 721
Children, How to feed, in the home, 49
Cook, It's fun to, 553
Cook, book, America's, 47
Cookery, Experimental, 47
Diabetic, patients, A Primer for, 131
Diabetic, primer, for children, 453
Dictionary, American illustrated medical, 817
Dictionary, A, of foods and nutrition, 818
Diet, and high blood pressure, 554
Diet, manual, Mount Sinai Hospital, Philadelphia, 361
Dietetics, Practical, 48
Eat, and keep fit, 453
Executives, good, How to develop, 205
Finger-tip control, 721
Food, family's, 48
Food, in health and disease: preparation, physiological action and therapeutic value, 49
Food, for health, Low cost, 48
Food, and physical fitness, 553
Food, preparation studies, 361
Food, service, in institutions, 360
Food, study, Experimental, 360
Food, tables, 283
Food, values, of portions commonly served, 48
Foods, Advanced, and meal preparation, 49
Foods, canned, Nutritive value of, 554
Foods, canned, recipes for fifty, 819
Foods, Elementary, and meal preparation: a laboratory manual for college students, 49
Foods, production, marketing, consumption, 818
Foods, values, their nutritive, economic and social, 654
Health, division, international, report, 819
Health, organisation, Bulletin of the, 817
Health, section, report. World federation of education associations, 362
Home economics, Report of the chief of the bureau of, 1937, 205
Home economist, Business opportunities for the, 282
Home, management, with special reference to the college home management house, 203
Hygiene, Social, nursing techniques, 721
Ice cream, for small plants, 204
Jellies, jams and preserves, Home-made, 554
Kitchen, manual, Commercial, 204
Life, Little things in, 130
Man, bread and destiny, 131
Medical, terms, Taber's digest of, 132
Menu maker, Automatic, 818
Menu, suggestions, Seasonal, 283
Menus, luncheon, High profit, 205
Nursing, care, of communicable diseases, 655
Nutrition, Child, in camp and institution, 654
Nutrition: final report of the mixed committee of the League of Nations on the relation of nutrition to health, agriculture and economic policy, 130
Nutrition, in health and disease, 653
Nutrition, of the infant and child, 361
Nutrition, manual, 721
Nuts, and ways to use them, 554
Pabst, At home with, 283
Poisoning, the public, 47
Recipe, file, Quantity, 361
Recipes, at moderate cost, 552
Reducing, Deuce of, 47
Rockefeller foundation, A review for 1937, 453
Trailer ahoy, 132
Vitamin B_1, (thiamin), and its use in medicine, 652
Vitamins, in canned foods, 362
Vitamins, and their clinical applications, 655
Botulism, ab. 668
Bread, improving nutritive value of, ab. 456
British Dietetic Association, ed. 808
Bromine, in nutrition, ab. 54
Buckwheat, cakes, and Indian batter, ed.* 441
Budgeting, hospital dollar, ab. 565
student's food dollar,* 692
Building, management, ab. 138, 213, 289, 460, 825
Business manager, a.r. 779
Business meeting, a.r. 804

Butter, and margarin, water soluble vitamins in, c.c.* 277
Buying, (*see* food, beverages, etc.) ab. 460, 564, 567
Buying, the best, for the money, c.c.* 129

Cabbage, Chinese, calcium in, ab. 366
Cafeteria (*see* lunchroom)
commercial, ab. 142, 829
decorating the, ab. 734
employees, trained, ab. 292
hospital,* 99, ab. 291
school, ab., 216, 462, 463, 734, 827
school, and public health, ed.* 39, ab. 372
school, report, joint committee, c.c.* 811
school, symposium, Richmond meeting,* 109
Calcium, balance, of rats, roughage and the, ab. 727
in cabbage, ab. 366
deficiency, and intestinal stasis, ab. 210
food, availability of, ab. 662
metabolism, vitamin D and, ab. 559
and phosphorus, deficiencies, in human diet, ab. 455
requirements, determination of, ab. 668
sources, animal,* 256
use and retention, ab. 57
utilization, as affected by lactose, ab. 55
Cancer, urinary cholesterol in, ab. 660
Carbohydrate (*see* starches)
metabolism, adrenal cortex and, ab. 556
Carbohydrates, effect, growth, calcification, ab. 136
Cardiovascular, conditions, vitamin B in, ab. 367
Caries, dental (*see* teeth)
in American Indian children, ab. 211
controlling, ab. 50, 136, 563
familial resemblance in, ab. 670
and fluorosis, ab. 670
incidence, seasonal, ab. 561
lactobacillus in, ab. 556
nutritional state and, ab. 207
sex differences, ab. 824
tissue changes in, ab. 664
and vitamin D, ab. 560
Carotene, and ascorbic acid, fruits and vegetables, ab. 456
stability of, ab. 662
Carotenemia, effect, on function, thyroid and liver, ab. 364
Carrots, and vitamin C, ab., 725
Cataract, treatment, riboflavin, ab., 210
Cereals, breakfast, egg-replacement value, ab. 726
Children, assimilation, protein, ab. 208
fat, ab. 558
malnourished, etiologic factors, ab. 823
perspiration, insensible, ab. 556
China, deficiency diseases in, c.c.* 641
nutrition work in, c.c.* 445
Cholesterol, blood, ab. 54
in milk, ab. 363
Cod liver oil, toxic action, ab. 135
vitamin A, ester in, ab. 821
Coffee, buying, preparing, ab. 142, 212, 291, 370, 730
Colitis, chronic, ab. 555, 656
regional, ab. 211
treatment, ab. 50, 212
ulcerative, food allergy in,* 177
Colostomy, management of, ab. 656
Committee (*see* nominating, etc.)
Community, education, section, a.r. 783
health, education,* 512
Conservation, soil, nutrition and,* 424
Constipation, children, and acidophilus milk, ab. 555
Consumer, education, ab. 139, 213, 371, 567
Cookery, book, Dr. Nash's, ab. 134
Cooking, costs, control, ab. 214
Copper, in blood, ab. 134, 284
effect, high levels, ab. 457
Cosmetics, fallacies of, ab. 657
Costs (*see* food, equipment, etc.)
Cough, nonspecific, irradiation in, ab. 134
Cranberries, in the diet, c.c.* 644
Creatinine, in blood and urine, ab. 54
Current comment, 41, 122, 194, 275, 353, 445, 544, 641, 716, 811
Current literature, 50, 133, 206, 284, 363, 454, 555, 656, 723, 820
Cystine, methionine, and homocystine, ab. 54, 135, 211, 458, 821

Deacon Porter's hat, c.c.* 196
Deaminization, locus of, ab. 561
Defence, mechanism, diet and, ab. 723
Deficiency, diseases, related to pellagra,* 157
iron and copper, effect, ab. 56
mineral, and energy metabolism, ab. 56
nutritional factors in, ab. 284
states, associated with gastro-intestinal diseases, ab. 206
Deficiencies, dietary, ab. 727

Dental (*see* caries, teeth)
development, nutritional factors in, ab. 822
interns, students, teaching nutrition to,* 506, c.c.* 546, a.r. 789
Dermatosis, due to vitamin A deficiencies, ab. 557
Desserts, ab. 369, 374
Diabetes, and central nervous system, ab. 137
death rate in, ab. 557
diets, old and new, ed.* 639
experimental, in dogs, ab. 56
incidence, ab. 207
juvenile, blood sugar in, ab. 51
juvenile, diet in, ab. 455
juvenile, growth, retardation in, ab. 454
mortality in, ab. 285
obesity, and, ab. 557
pancreatic, ab. 52
a public health problem, ab. 207
review of literature, ab. 52
treatment, protamine insulin, ab. 135, 211, 212, 454, 459, 727
Diarrhea, diet in, ab. 363
infantile, apple in treatment, ab. 57, 364
infantile, pectin agar treatment in,* 34
Diet, more abundant,* 1
and deficiency disease, as related, in China, c.c.* 641
and health, ab. 368
and income, ab. 821
in insulin shock therapy,* 261
of man, ancient and primitive, ab. 555
and resistance, ab. 133
restricted, in potassium,* 759
self-selection of, ab. 668
therapy, section, a.r. 787
well balanced, ability of animals to choose, ab. 723
Diets, efficiency of, measuring, ab. 457
Dietary, department, motion pictures, in education, c.c.* 41
department, organization,* 705
department, personnel management in,* 343
Dietetics, hospital opportunities in, c.c.* 274
teaching (*see* dietitians, dental, medical, nurses, etc.)
Dietitian, administrative, non-hospital, student courses, a.r. 791
in the airways, c.c.* 197
approach to the public, ed.* 269
approved training, meeting of heads, courses, c.c.* 44
as an employer,* 348
in food clinic, a.r. 787
graduate, training, for the hospital, a.r. 790
the hospital, and the administrator, ed.* 194
in the hotel, ab. 566, ed.* 714
in institutions, state,* 681,* 685
and her profession,* 751
questionnaire for would-be, c.c.* 815
and the radio, ed., 269, c.c. 282
relations, professional, ab. 142, 371
selecting, well qualified, c.c.* 201
standards for, ab. 214, 215
student, courses, approved by the A.D.A., a.r. 792
student, daily schedule, reports, c.c.* 718
student, educational requirements of, c.c.* 44,* 528, a.r. 800
student, training, school cafeteria, ab. 374
in veterans administration, ab. 461
without degrees, academic advancement for, a.r. 791
Diphtheria, toxin, influence vitamin C on, ab. 284
Diseases (*see* deficiency, diabetes, etc.)
of metabolism and nutrition, ab. 288, 364
Dishwashing, machines, and methods, ab. 285, 292, 369, 826, 828
Diverticulitis, diet in, ab. 57
Dog, foods, ab. 290
Dormitories, furnishing, ab. 567
Dystrophy, muscle, dietary factors, ab. 726

Edema, nutritional, ab. 53
Edestin, nutritive value, ab. 662
Editorial, 39, 121, 188, 269, 352, 441, 540, 637, 713, 808
Education, (*see* community, public health, nutrition, student)
visual, films of dietary department activities, a.r. 796
Eggs, nutritive value, review of investigations,* 593
preservation and storage, ab. 208
Electricity, cooking cost, ab. 290, 461, 729
Employees, management, ab. 141, 142, 213, 214, 215, 216, 291, 292, 293, 372, 463, 567, 568, 734, 825–828
selecting, ab. 142, 565
training, ab. 566, 828
Employer, dietitian as,* 348
Endocrine, drugs, and metabolism,* 172
Epilepsy, electro-encephalogram, ab. 367
Equipment, costs, ab. 139
electrical, ab. 140

Equipment, gas, ab. 140
selecting, modern, ab. 293, 826
slicing, ab. 292
Ergosterol, irradiated, ab. 660
Executive, committee, a.r. 802
Exhibits, educational, a.r. 796

Factor, antiparalytic, of chick, ab. 725
Fat, deficiency, metabolism studies, ab. 135
and lactose utilizaton, ab. 209
utilization, ab. 457
Feast, of five tables, c.c.* 719
Fever, rheumatic, vitamin C in, ab. 557
Fibrin, as source of protein, synthetic diets, ab. 366
Fire, insurance, ab. 369
prevention, ab. 290, 566, 568
Fitness, physiologic approach, ab. 658
Flies, prevention, ab. 460
Floors, wood, care of, ab. 462
Flour, what the buyer should know, c.c.* 123
Fluorine (*see* teeth) ab. 829
Food, allergy (*see* allergy)
canned, sterilization methods, ab. 456, 732
clinic, a.r. 787
clinic, a day at, c.c.* 278
control, cafeteria, ab. 370
control, institution, metric weights in,* 697
control, institutions, California state,* 685
control, residence hall,* 692
cost, vitamin C and, c.c.* 354
costs, ab. 139, 213, 214, 290, 369, 374, 461, 462, 564, 568, 730, 825
customs, French-Canadian c.c.* 812
customs, Peruvian, c.c.* 447
dollar, student's, budgeting,* 692
and drug act, new federal, ab. 666, 827
facts and fallacies, ab. 658
fads, ab. 363
of first coeds, ed.* 352
habits and customs, foreign, c.c.* 648, a.r. 785
handlers, certification of, ab. 51
intakes, patients, various groups, comparative study,* 339
and longevity, ab. 463
merchandising good, at reasonable prices,* 117
and nutrition, student of, opportunities for,* 522
poisoning,* 412*, 436, ed.* 809
preservation, ab. 213, 371, 456
purchasing, specifications, ab. 828
and public health,* 412
service (*see* cafeteria, hospital, hotel, lunchroom, restaurant)
service, airways, ab. 370, 568, 827
service, dining car, ab. 461
service, hospital,* 330, ab. 214, 370, 461, 462, 564, 825–828
service, university, ab. 568,* 705
standards, federal, ab. 824
supplies, ab. 730
technology, conference, ab. 456
utensils, board of health rulings, ab. 724
waste, ab. 372
Foods, purchased, national and racial groups, c.c.* 648
Fowl, buying, ab. 140
Fractures, jaw, diet for, ab. 56
French-Canadian, dishes, holiday, c.c.* 812
Fruits and vegetables, buying, ab. 463, 730
commercially frozen, carotene and ascorbic acid in, ab. 456
standardization, ab. 569
yields, ab. 374
Furnishings, dormitory, ab. 567

Gall bladder, disease, bile salt therapy in, ab. 656
Gastric, acidity, effect orange juice, ab. 454
acidity, in experimental ulcers, ab. 454
emptying time, ab. 820
motility, ab. 363
secretion, mechanism of, ab. 820
secretion, peptic ulcer, ab. 133
Gelatin, hydrophilic colloidal diet, ab. 454
Glassware, ab. 140, 143, 212
Glomerulonephritis, acute, ab. 668
Glucose, absorption of, ab. 206
tolerance, in anacidity, ab. 363
tolerance, manipulation, by diet, ab. 557
tolerance, test, c.c.* 650
Glycogen, deposition of, ab. 206
Gout, diet in relation to, ab. 562
Grades, government, ab. 371
Grapes, buying, ab. 214
juice, iron in, ab. 208
Grapefruit, buying, ab. 140
Growth, changes in human stature, ab. 374
handicaps to, of rural negro children, ab. 724
and milk supplements, ab. 723, 820

Health (*see* community, public, school, students)
Heart, disease, nutritional, ab. 555
Height, of American women, ab. 822
History, committee, a.r. 798

Home economics, education in, ab. 372
international federation, ab. 215
opportunities in, ab. 142
and the radio, ab. 371
research, ab. 141, 371
student, apprentice training for, ab. 141
Homocystine (*see* cystine)
Honey, mineral constituents of, ab. 209
Hormones, and vitamins,* 397
Hospital, bookkeeping, ab. 567
employees, feeding, ab. 825
food measuring effectiveness in preparation and service,* 330
food, service (*see* food)
labor, policies,* 309,* 348, ab. 567
management, dietary, ab. 565
meal-time at the, c.c.* 279
training courses, ultimate aim of,* 528
Hotel, management, ab. 141, 213, 214, 215, 293, 369, 370, 461, 462, 564, 565, 567, 730, 732, 825–827
Hotels, foreign, ab. 215
women in, ab. 566, ed.* 714
House of Delegates, first meeting of, ed.* 41, a.r. 805
Housekeeping, office, ab. 371
tips on, ab. 826

Infant, and child, normal, feeding the,* 264
feeding, low cost, ab. 368
feeding, psychological aspects of, ab. 563
Infants, growth, mental and physical, ab. 50
intestinal bacteria of, ed.* 270
new-born, weight loss, cod liver oil and, ab. 455
supplementary diet for, ab. 556
Infections (*see* food poisoning)
food handlers, ab. 216
milk-borne, ab. 134
Insulin (*see* diabetes)
extra diabetic uses of, ab. 52
shock, therapy, diet in,* 261
Intestinal, flora, minerals and, ab. 57
Inventories, monthly, ab. 139
Investigation, board, a.r. 781
Iodine, and anthrax peril, ab. 829
content of vegetables, ab. 559
deficiency, in stock diet, ab. 210
effect of, on growth, ab. 560
numbers, of dietary and serum fats, ab. 210
Iron, analyses, thiocyanate, ab. 462
and copper, in blood, ab. 134
excretion, urinary, ab. 54
in nutrition of rat, ab. 727
retention, how affected, ab. 57, 134, 284, 455, 562

Jaundice, serum phosphatase in, ab. 559
Journal, board, a.r. 781
editor, a.r. 780

Keratoconus, and vitamin D, ab. 562
Ketosis, administration of glucose in, ab. 660
Kitchen, planning, equipment ab. 216, 371, 827

Labeling, canned foods, ab. 139
Labor, policies, England, ab. 827
policies, hospital,* 309,* 348
Laundry, expense, reducing, ab. 370
Laxatives, and bowel consciousness, ab. 363
Legislation, labor, etc., ab. 138, 213, 827
Legislative, committee, a.r. 798
food, drugs and cosmetic act, ab. 724
Library, committee, a.r. 799
Lipids, of dystrophic rabbits, ab. 660
of nerves, ab. 821
Liver, extract, in sprue, ab. 133
fatty, in goose, ab. 53
lipids, ab. 457, 562
Los Angeles, in 1939, c.c. 716
Lunch, school, ed.* 121, ab. 215, 828
school, bread, c.c.* 122
school, symposium, ab. 141
supervised, penny, Chicago, ab. 212
Lunchroom (*see* cafeteria)
accounting, ab. 292
college, ab. 372
equipment, ab. 828
management, standards of training for college graduates,* 93
merchandising food for,* 117
school, operating with pupil satisfaction and financial success,* 85
school, purchasing of bread, macaroni, spaghetti for, c.c.* 126
school, standardized service portions for, c.c.* 125
Lysozyme, in defense mechanism, ab. 51

Macaroni, buying, c.c.* 126
Magnesium, deprivation, ab. 286
requirement, ab. 286
Maize, vitamins in, ab. 56
Malnutrition, judging status of, ab. 288
Management (*see* employee, cafeteria, hospital, etc.)

Margarin, vitamin content, c.c. 277
Marihuana, ab. 732
Meat, cookery research, recent developments in,* 623, ab. 565
grading, ab. 730
in nutritional anemia, ab. 286
review of literature on, ab. 209
roasting, ab. 216
storage, ab. 460
Medical, student, teaching nutrition to,* 489,* 500, c.c.* 545, a.r. 789
Medicine, preventive, and nutrition, ab. 728
Menu, cards, employees, ab. 139
children's, ab. 368
prices, ab. 139, 824
table d'hote, ab. 564
Merchandising, food,* 117, ab. 138, 139, 213
Metabolism, basal, and benzedrine sulfate, ab. 53
basal, standards, for children, ab. 454
diseases of, ab. 364
effect, low temperature on, ab. 287
endocrine drugs and,* 172
influence, plasma protein on, ab. 365
nitrogen, ab. 53, 286
phospholipid, ab. 134, 457
phosphorus, ab. 365
protein, and growth hormone, ab. 54
respiratory, infancy and childhood, ab. 51
sterol, in rat, ab. 725
sugar, and nervous system, ab. 52
sulfur, ab. 365
tryptophane, ab. 365
of undernourished, girls, ab. 657
Methionine (*see* cystine)
Metric weights, use of, institution food control,* 697
Microörganisms, peas and beans, ab. 208
Migraine, and epilepsy, ab. 656
Milk, activatability of, ab. 55
canned, vitamin A, and C content of, ab. 656
distribution, ab. 139, 290
dry, use of, ab. 290
factors in, and intestinal bacteria, infants, ed.* 270
irradiated, in infant feeding, ab. 455
irradiated, stability of vitamin D in, ab. 558
laboratory, maternal, ab. 657
pasteurized, contamination of, ab. 208
pasteurized, phosphatase test in, ab. 364
pasteurized, raw, and baby formulae, vitamin C content, c.c.* 275
production, effect sulphydryl compounds, ab. 366
and public health, ab. 724
supplement, effect on physical status, children, ab. 820
vitaminization of, ab. 724, 822
Milwaukee, meeting, ed. 352, 534, ed. 808
meeting, annual reports, 773
Mineral, content, normal animals, ab. 287
deficiency, and energy metabolism, ab. 56
metabolism, effect saccharides upon, ab. 366
oil, effect on ingested food, ab. 58
Modernization, hospital, ab. 568
hotel, ab. 141
Motion pictures, in education, c.c.* 41, ab. 143
Myasthenia gravis, prostigmin in, ab. 137

Nephritis, diet and, ab. 57
sore mouth in, ab. 54
treatment, clinical résumé, ab. 288
Nephrotic, syndrome, children, metabolic study, ab. 284
Neuritis, vitamin B in, ab. 58, 563
News notes, 59, 144, 220, 294, 376, 464, 570, 672, 738, 831
Nicotinic acid (*see* pellagra)
and chick dermatitis, ab. 559
differentiation, rat dermatitis, chick dermatitis factor, ab. 664
in urine, ab. 725
Nitrogen, metabolism, diet and, ab. 286
urinary, endogenous, basal metabolism, rats, ab. 210
urinary, of woodchucks, ab. 209
utilization, by mammary gland, ab. 209
Nominating committee, report, 1937–38, c.c. 449
Nominees, A. D. A., 1938–39, c.c. 450
Nurses, curriculum, nutrition, in,* 492
homes, ab. 218
outlines, for teaching, a.r. 789
student, state board examinations for, c.c.* 42
Nut, proteins, nutritive value, ab. 136
Nutrition, in China, c.c.* 445,* 641
committee, Sweden's c.c.* 356
in Denmark, ab. 368
education, new fields, new emphases in, ed.* 540
history, and dental problems, ab. 561
improved, factors in, ab. 136, 823
problems, international, ab. 823
public health education in, ab. 51, 241, ed.* 269, ab. 556, 657, a.r. 786
on the radio, c.c.* 353, ed.* 541, ab. 569

Nutrition, relation to optimal health, ab. 821
research, qualifications for, ed.* 544
in school health program, ed.* 248, 273
and soil conservation,* 424
teaching, students (*see* dietitian, dental, medical, nurses)
Nutritional, diseases, ab. 288
Nutritionist, city health, ab. 141
community, a.r. 784
and home economics training school, a.r. 784
in public health work,' 241, ab. 462
in school health,* 273
in student health work,* 248
in welfare agencies, a.r. 785

Obesity, and endocrines, ab. 670
management of, ab. 824
measurement, by creatinine coefficient, ab. 284
Orange, juice, diluent, ab. 291
yield, according to variety, ab. 565
Organization, and procedure book, a.r. 799
Oysters, raw, staphylococci in, ab. 51

Painting, ab. 138
Patient, cooperation, securing, ed.* 192
lessons in dietetics for, ab. 142
the, and his vitamins, ab. 133
Patients, food intake, comparative study,* 339
teaching, ethics of, c.c.* 814
teaching, special diets, ab. 730
Peanut, proteins of, ab. 286
Peas, and vitamin C, ab. 725
Pellagra (*see* nicotinic acid)
animal deficiency diseases related to,* 157
history and incidence of, ed.* 188
myxedema and, ab. 557
nicotinic acid in, ab., 57, 137, 211, 287, 562, 658, 666, 728, 820
present knowledge of, clinical studies,* 168
treatment of, ed.* 190, ab. 458, 561
Personnel (*see* employee)
management, in hospital dietary department,* 343
Peruvian, food customs, c.c.* 447
Phospholipid, metabolism, ab. 134
Phosphorus, metabolism, ab. 365
sources, animal,* 256
Pies, ab. 138, 291, 369
Polyneuritis, alcoholic, vitamin B_1 therapy in, ab. 287, 367
Potassium, in the diet,* 183
diet, restricted in,* 759
serum, glucose effect on, ab. 725
Potatoes, preparation, ab. 462
Pregnancy, basal metabolism in, ab. 560
calcium, phosphorus deficient diets during, ab. 664
diagnosis, and care, ab. 728, 824
toxemias of, ab. 133, 557, 657
President's address,* 751, a.r. 773
President-elect, a.r. 774
Professional, education, section, a.r. 789
Prostigmin, in myasthenia gravis, ab. 137
Protamine, insulin (*see* diabetes, treatment)
Protein, adequacy, college students,* 251
effect of heat on, ab. 662
effect of high, on kidney, ab. 286
effect of quality, on estrus cycle, ab. 55
egg and milk, value of, ab. 662
intake, effect on utilization energy, ab. 366
low, and serum lipids, ab. 53
serum, regeneration, ab. 724
sources, animal products,* 256
undigested, absorption, ab. 656
Proteins, of black bean, ab. 286
cereal, nutritive value, ab. 662
edestin, effect autoclaving, ab. 662
egg and milk, biological values, ab. 662
of first importance, ab. 367
of mammary gland, ab. 559
nut, nutritive value, ab. 136
of organs and tissues, ab. 559
of peanut, ab. 286
potency values, serum regeneration, ab. 724
specific dynamic effect, ab. 560
Provision, schedule, for relief, c.c.* 199
Psoriasis, treatment, vitamin D, ab. 58
Psychology, of attitudes, ab. 292
Public health, aspects, of food,* 412
evolution of, ab. 134
and restaurants, ab. 463
and social welfare, ab. 141
work, nutritionist in,* 241
Publications, commercial, a.r. 786
Publicity, a.r. 800
Pyruvic, acid, utilization, ab. 725

Radio, and the dietitian, c.c.* 279,* 353, ed. 541, ab. 569
dramatizing hospital dietary department on, c.c. 547
and home economics, ab. 371
Recipes, tested, ab. 827
Refresher, course, for dietitians, c.c.* 549
Refrigeration, equipment, temperature, ab., 214, 216, 293

Reports (*see* annual)
Research, awards, ab. 142, 371
  nutritional, recent advances in,* 8
  workers, qualifications for, ab. 141, ed.* 544
Resolutions, a.r. 806
Restaurants, chain, ab. 138
  management, ab. 138, 141, 212, 369, 459–463, 564–568, 729, 734–736, 824
  in New York hotels, ab. 826
Riboflavin (*see* vitamin B_2)
  content, of meats, ab. 726
  deficiency, in dogs, ab. 212
  sources, requirements, ab. 458
  treatment, cataract, ab. 210
Rickets (*see* calcium, vitamin D)
  bone calcium in, ab. 287
  manganese, in rats, ab. 821
  sunshine and, ab. 206

School (*see* cafeteria, lunch, lunchroom)
  handwashing in, ab. 372
  health program, nutrition in, ed.* 273, ab. 372, 732
Science, why study, ab. 829
Scotland, educational institute, ab. 732
Scurvy (*see* vitamin C)
  brain hemorrhage in, ab. 558
Secretary, a.r. 776
Sick, benefits, ab. 58
Silverware, purchase, care, ab. 291
Soap, making, ab. 460
Social security, program,* 431
  record keeping, ab. 825
Soy bean, nutritive value, ab. 555
Spinach, to eat or not to eat, ed.* 443
  nutritive value, ab. 136
Sprue, liver extract in, ab. 133
Standards, value of,* 25
Staphylococci, in raw oysters, ab. 51
Starches (*see* carbohydrate)
  digestibility, relative, ed.* 637
Sterols, intestinal tract, fate of, ab. 559
Stomach, emptying time, ab. 285, 363
Stove, Swedish type, ab. 140
Student (*see* dietitian, nurse, medical)
  health work, personal dietary instructions,* 248
  majoring in food and nutrition, opportunities,* 522
  undergraduate, summer camp experience, c.c.* 358
Students, college, corrective diets for, c.c.* 717
  college, health of, ab. 215
  protein adequacy for,* 251
Sugar, diets, effect, activity, body weight, ab. 726
  metabolism, nervous system and, ab. 52
Sugars, nutritive value, ab. 55
Sulfanilamide, elixir, ab. 371
Sulfur, metabolism, ab. 365

Taste, score cards for judging, ab. 139
Teaching (*see* adult, dietetics, nutrition, students)
Teeth (*see* caries)
  calcium metabolism and, ab. 50
  enamel, apposition of, ab. 50
  enamel, mottled, and water supply, ab. 824
  nutritive factors and, ab. 364, 371
  periodontal disease, experimental, ab. 56
  periodontal disease, dietary factors, ab. 210
Thiamin (*see* vitamin B_1)
  chemistry of, ab. 367
Tomato, juice, vitamin C in, ab. 371, 732
Tracy, Anna M., ed.* 713
Training, courses (*see* dietitian)
    hospital, ultimate aim of,* 528
    managers, lunchroom, ab. 734
Treasurer, a.r. 777
Trichinosis, United States and Hawaii, ab. 368, 670
Tryptophane, metabolism, ab. 365
Tuberculosis, diet in, ab. 567
  urinary output, vitamin C, ab. 364, 563

Ulcer, duodenal, and gastric acid, ab. 52
  gastric, rôle of protein in prevention, ab. 363
  peptic, ascorbic acid level in, ab. 820
  peptic, etiology, ab. 50, 133, 206
  peptic, experimental, cinchophen, ab. 285
  peptic, recurrences, causes, ab. 206
  peptic, treatment, dietary, ab. 50, 820
Ultraviolet, therapy, clinical aspects, ab. 666
Uniforms, maids and waitresses, ab. 826

Vegetables (*see* fruits and vegetables)
  iodine content, ab. 559
  microorganisms in, ab. 208
  mineral content, ab. 208
  preparation, cooking, study of waste and fuel consumed,* 615
  vitamin C content, ab. 558
Vice-president, a.r. 776
Vitality, new sources, for the people,* 417
Vitamin, water soluble, factor W, ab. 53
Vitamin A (*see* carotene, cod liver oil)
  assay and sources, ab. 666

Vitamin A crystalline, ab. 137
deficiency, and dark adaptation, ab. 668
deficiency, and renal lithiasis, ab. 57
and health, infants, ab. 458
pharmacology and therapeutics, ab. 666
requirements, ab. 561
summary on, ab. 562
toxicity of, ab. 662
and tumor, ab. 365
and visual adaptation, ab. 208, 364
Vitamin B, and appetite, children, ab. 560
complex, components of, ab. 287
complex, effect, ab. 52
complex, and intestinal function, ab. 555
deficiency, and pediculosis, ab. 666
Vitamin B_1 (*see* thiamin)
antineuritic factor, ab. 724
assay, method, ab. 727
deficiency, acute, ab. 560
in enzymic reactions, ab. 457
excretion, ab. 822
intake, effect of increased, ab. 50
intake, nursery school children, ab. 455
and neuritis, ab. 58
physiology of, ab. 367
requirements, ab. 658, 727
supply, in relation to needs, ab. 821
therapeutics of, ab. 367, 563
Vitamin B_2 (*see* riboflavin)
deficiencies, ab. 210
Vitamin B_6, relation, unsaturated fatty acid, ab. 660
Vitamin C (*see* ascorbic acid)
in arthritis, ab. 557
bioassay, ab. 822
and calcium, parallel action, ab. 723
content, milks, pasteurized, raw and baby formulae, c.c.* 275
content, Swiss chard, ab. 136
cost of, in food, c.c.* 354
deficiency, determination, ab. 211, 822
and diphtheria toxin, ab. 284
in fever, rheumatic, ab. 557
output, in tuberculosis, ab. 364
output, urinary, ab. 556
physiology, ab. 728
requirements, ab. 562, 726, 820
therapy, ab. 823
in tuberculosis, ab. 563
Vitamin D (*see* calcium)
assay and sources, ab. 666
in bile, ab. 135
excretion, intestinal, ab. 135
in keratoconus, ab. 562
milk, assays, ab. 822
milk, production, ab. 58
physiology and pathology, ab. 668
preparations, ab. 728
requirements, ab. 668
and skin respiration, ab. 53
Vitamin E, concentrates, ab. 824
summary on, ab. 561
Vitamin L, lactation factor, ab. 459
Vitamins, and enzymes, ab. 666
and hormones,* 397
and minerals, ab. 558
and the patient, ab. 133
present status, ab. 287
therapy, gastro-intestinal diseases, ab. 723
water soluble (B and G) of butter and margarin, c.c.* 277

Waffles, as restaurant specialty, ab. 138
Waitresses, ab. 143, 291, 369, 828
Weights and measures, public market, ab. 213
Wheat, distribution, ab. 290, 369
Who's who in this issue, 80, 152, 240, 308, 396, 488, 590, 680, 750
Work, human side of our,* 29

Xanthomatosis, nature of, ab. 561

Yeast, effect, on liver glycogen, ab. 55

AUTHOR INDEX

Abrahams, M., 808
Allender, E, 650
Anderson, H., 814
Ashkins, V., 183
Augustine, G. M., 309
Bain, K., 629
Ball, V. K., 654
Barber, E., 534, 653, 800
Bateson, F. E., 44, 528
Beilhart, L. J., 248
Blish, M. J., 123
Blood, A. F., 201, 800
Bone, M. L., 781
Bowes, A. D., 48, 546, 648
Bowman, K. M., 192
Boyd, J. D., 361
Braun, S. E., 777, 787
Breland, J. H., 283
Brennan, M. E., 125, 129
Brown, K., 716
Bryan, M. deG., 273, 811
Buck, D. C., 49
Buckstein, J., 453
Carden, G., 789
Carpenter, R. H., 343
Child, A. M., 361, 623
Church, C. F., 48
Clarke, H., 356
Comstock, L., 449
Cooper, L. F., 29, 540, 653, 751, 773
Cruickshank, E. W. H., 553
Crawford, W. L., 205
Dack, G. M., 809
Dann, W. J., 157
Dimond, B. F., 48
Dorland, W. A., 817
Drenckhahn, V. V., 512
Driscoll, A. M., 110
Dunlap, M., 705
Easton, A., 283
Eck, E. M., 99
Edgecomb, M. E., 655
Eichelberger, M., 796
Elliott, E. L., 786
Engle, L., 431
Erb, R. C., 47
Feeney, E. L., 791
Fingerhood, B., 194
Fischer, A. E., 453
Fisher, K., 279
Fleck, H. C., 49, 721, 815
Foley, M. A., 787
Frager, H., 283
Fuller, J. E., 412
Furnas, C. C., 131
Furnas, S. M., 131
Geitz, N., 722
Geyer, F., 278
Gleiser, F. W., 692
Goddard, V. R., 251
Gorrell, F. L., 48
Gillam, S. M., 790
Gillum, I., 256
Graves, L. G., 818
Graves, J. T., 441
Green, D. E., 652
Griem, B. L., 205, 537
Gross, I., 203
Hacker, D. B., 785
Hager, E. W., 354
Hall, I. S., 360
Halsted, S., 784
Hamley, J., 447
Handy, E. H., 204, 353
Hanselman, E. M., 339
Harding, T. S., 436
Harrington, M. M., 799
Harris, F. LaG., 654
Harris, I., 554
Harris, K. W., 791
Hart, C. C., 552
Hasker, R. R., 517
Hastings, D. W., 261
Hawley, E. E., 275, 489
Hemmersbaugh, M., 114
Henderson, R. A., 654
Heseltine, M. M., 241
Heyd, C. G., 25
Hoffman, F. L., 202
Holmes, A. M., 358
Hornsby, R. M., 818
Houser, L., 42, 787
Huddleson, M. P., 780
Hurlock, E. B., 130
Kahn, R. M., 776
Kelly, M. C., 123
King, F. B., 615
King, R., 553
Koch, C., 41, 796
Kohman, E. F., 362, 644
Kramer, M. M., 256
Krantz, J. C., 172

Lenfest, D. I., 779
Lewis, M. E., 203
Lilienthal, D. E., 424
Lowe, B., 47
Luros, G. O., 721
MacDonald, N. F., 330
MacKinnon, F., 789
McCollum, E. V., 8
McDonald, M., 278
McLester, J. S., 1
Mackie, T. T., 177
Maltby, L. M., 553
Marble, B. B., 545, 776
Martin, E. A., 109
Martin, E. W., 798
Mason, G., 646
Mayer, A. L., 788
Merritt, K. K., 264
Metzelthin, P. V., 197
Milavetz, D., 547
Miller, E. C. L., 817
Mitchell, H. S., 544, 653, 789
Mitchell, K., 47, 49
Morgan, A. F., 360
Morgan, H. R., 251
Mottram, V. H., 283
Mount, M., 798
Murlin, J. R., 397
Nash, C. E., 132
Needham, J., 652
Nesbitt, E., 445
Niles, K. B., 361
Northrop, M. W., 339, 697
Odum, H. W., 417
Oram, F., 721
Osterud, N. D., 697
Pattee, A. F., 48
Pendergast, W. S., 93
Perry, E., 127
Perry, M. W., 500
Peters, F., 681
Pillsbury, M. E., 655
Radloff, E. M., 283
Remington, R. E., 48
Rogers, M. P., 85
Richardson, F. M., 348
Rose, M. S., 593
Rynbergen, H. J., 492
Schippmann, B. S., 799
Schmidt, L., 717
Schuck, C., 784
Sebrell, W. H., 188
Sedgewick, J., 685
Severance, G. M., 692
Smith, D. T., 168
Smith, M. E., 719
Snapper, A., 283
Somogyi, M., 639
Spalding, M., 112
Spearman, R., 117
Spies, T. D., 652
Spitz, G., 549
Steinbarger, M. C., 554
Stepp, W., 655
Stewart, J. J., 818
Stockton, M. D., 718
Storms, L. B., 806
Sullivan, L. M., 361
Sure, B., 130
Swanner, G. M., 655
Sweeney, M. E., 49
Taber, C. W., 132, 818
Taillon, F., 812
Todhunter, E. N., 283, 522
Tracy, A. M., 196, 774
Vahlteich, H. W., 277
Vahlteich, E. McC., 593
Victor, Sister M., 759
Waide, S. E., 261
Walsh, H. E., 783
Washburn, G., 34
West, B. B., 360
White, R. L., 506
Whiteman, E. F., 554, 615
Whitsed, J. deK., 553
Wilder, R. M., 131
Williams, R. R., 652
Wood, A., 782
Wood, LeV., 360
Woodhouse, C. G., 282
Wright, J. L., 721
Yeatman, F. W., 554
Yü, H., 641
Zwemer, R. L., 183

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RECENT ADVANCES IN THE SCIENCE OF NUTRITION

IV. Some Accomplishments of Vitamin D Research

● By 1932, many of the basic facts concerning vitamin D had been clearly established (1). At that time, the International system of denoting vitamin D unitage had not been universally adopted. However, the antirachitic potencies of a wide variety of biological materials had already been explored; the need for standardization of assay methods was appreciated; the minimum requirement of infants and children for vitamin D had been estimated; and the probable "multiple" nature of the vitamin definitely indicated.

Since 1932, the importance of vitamin D in human nutrition and the challenge of the many unanswered questions regarding this factor have served to stimulate research both in the clinic and in the laboratory. It is of interest to note some of the outstanding advances made in our knowledge of vitamin D which the past six years have brought.

It is now known that at least ten different sterol derivatives are capable of exhibiting the physiologic properties of vitamin D. Of these, only two may be considered of prime importance as far as practical application in human nutrition is concerned, namely, the activation products of ergosterol and 7-dehydro-cholesterol. The remaining forms are of considerable theoretical importance in that their identification has completely established the multiple nature of vitamin D (2).

Further research has also defined more closely not only the vitamin D requirements of normal infants and children, but also of premature infants and those peculiarly susceptible to rickets. Apart from conditions of pregnancy and lactation, the possible requirement of the human adult for vitamin D is still not known (3). The International system of expressing vitamin D potency has been universally adopted; bioassay methods have been standardized (4); and last but not least, a high degree of standardization has been attained, not only in regard to the antirachitic potency of vitamin D preparations, but also as to the extent to which the vitamin D contents of certain foods should be increased by the various means available (3).

While some foods, including some canned foods of marine origin, are valuable food sources of vitamin D (5), no combination of common foods—as they occur naturally—can supply the demands of the infant and child for the antirachitic factor. Although there is no reason as yet to believe that the normal adult requirement for vitamin D is not largely fulfilled by a varied diet of protective foods, it is definitely known that the infant and child dietaries must be supplemented with or fortified by vitamin D.

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(1) 1932. J. Amer. Med. Assn. 99, 215 and 301.
(2) J. Amer. Med. Assn. 110, 2150.
(3) Ibid. 110, 703 and 1179.
(4) 1936. U. S. Pharmacopeia, XI Decennial Revision.
(5) 1935. J. Home Econ. 27, 658.
1933. Science 78, 368.

We want to make this series valuable to you, so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles. This is the forty-third in a series, which summarize, for your convenience, the conclusions about canned foods reached by authorities in nutritional research.

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